

EX LIBRIS
THE COOPER UNION
Museum Library
THE GIFT OF
Robert W. Chanler

REVERENDISSIMO IN CHRISTO PATRI,

JOANNI MOORE,

PROVIDENTIA DIVINA,

ARCHIEPISCOPO CANTUARIENSI,

ANIMI CANDORE,

INGENII SUAVITATE,

VITÆ INTEGRITATE

SPECTATISSIMO,

TERTIUM HUNC

NATURÆ VIVARIII

FASCICULUM,

CULTU OMNI ET OBSERVANTIA,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO
THE MOST REVEREND FATHER IN GOD,
JOHN,
BY DIVINE PROVIDENCE,
ARCHBISHOP OF CANTERBURY,
&c. &c. &c.
THIS THIRD VOLUME
OF
THE NATURALIST'S MISCELLANY
IS,
WITH THE MOST PROFOUND HUMILITY, INSCRIBED,
BY
HIS GRACE'S MOST DEVOTED SERVANTS,
GEORGE SHAW,
FREDERICK P. NODDER.

QL
46
S53
1789
V.3
CHMAB

CERTHIA COCCINEA.



CHARACTER GENERICUS.

Rostrum arcuatum, tenue, subtrigonum, acutum

Lingua acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 184.

Picæ.

CHARACTER SPECIFICUS, &c.

CERTHIA COCCINEA, alias caudaque nigris,
rostro pallido.

CERTHIA COCCINEA.

Gmel. Syst. 1. p. 470.

CERTHIA VESTIARIA.

Lath. Ind. orn. p. 282.

Certhia Coccinea, in insulis Sandvicensibus copiosissima, rostrum gerit prælongum, incurvum et pallidum: tota avis coloris est læte rubri, exceptis alis caudaque nigris: tabula illam exprimit magnitudine naturali: interdum utrinque juxta humeros macula alba conspicitur.

DBI



London: Published by J. G. S. 1797

By T. G. S. 1797. Printed by J. G. S. 1797.

THE
SCARLET CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnaeus. Latham. Pennant.

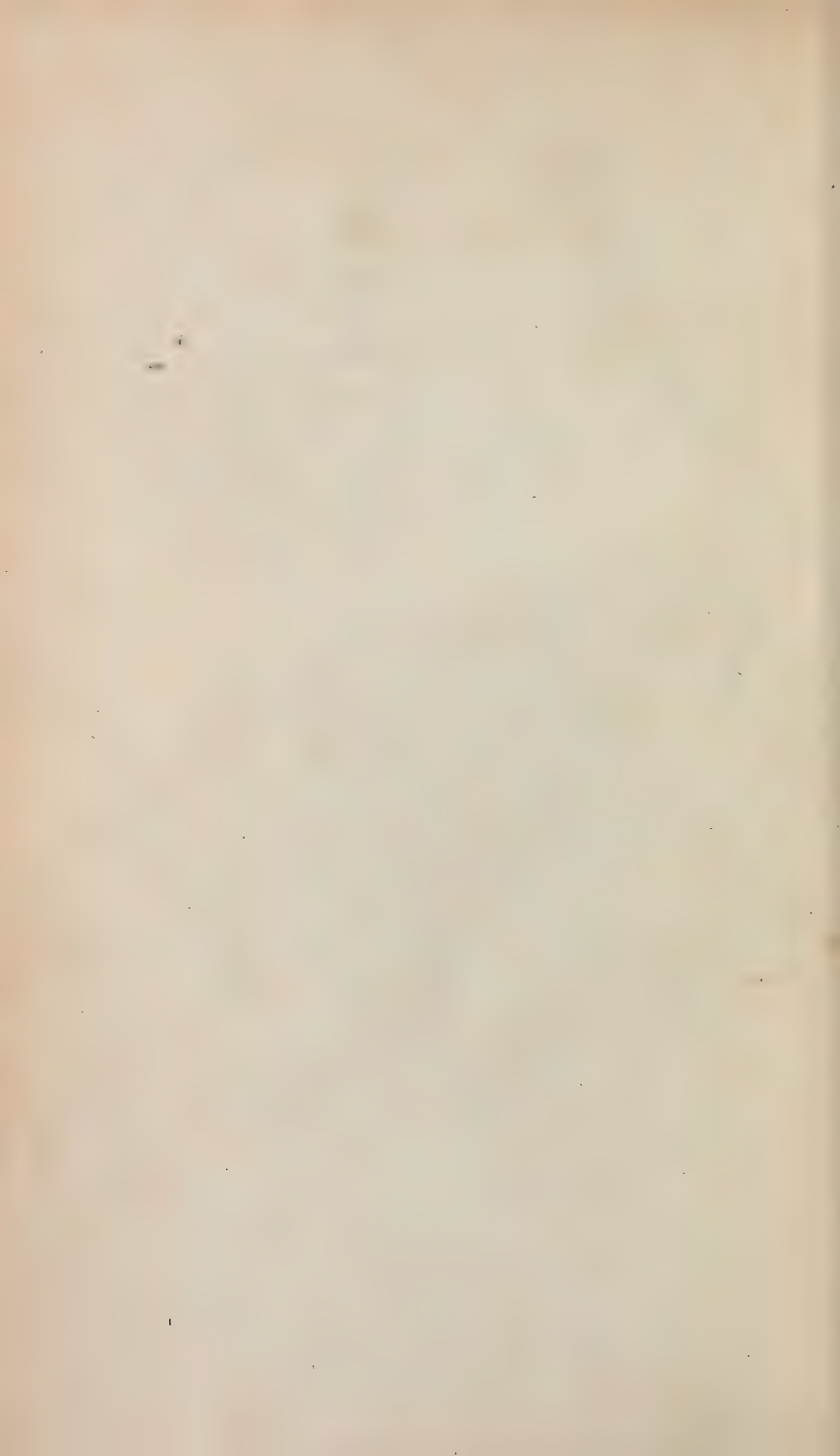
SPECIFIC CHARACTER, &c.

SCARLET CREEPER, with black wings and tail, and pale bill.

HOOK-BILLED RED CREEPER.

Lath. Synops. 1. p. 704.

The Scarlet Creeper is a native of the Sandwich Islands, where it is extremely numerous. The bill in this species is very long, hooked, and of a pale colour. The whole bird is of a vivid red, except the wings and tail, which are black. In some individuals a white spot appears on each side the shoulders.



RANA CORNUTA.



CHARACTER GENERICUS.

Corpus tetrapodum, ecaudatum, nudum.

Lin. Syst. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA PALPEBRIS CONICIS.

Lin. Syst. Nat. p. 356.

BUFO CORNUTUS s. *Spinofus Virginianus*.

Seb. 1. t. 72. f. 1. 2.

BUFO CORNUTUS.

Laur. amph. p. 25. n. 2.

Qui quæstioni respondere vellet, quidnam animal effinxerit natura deformissimum? vix hæreret ranam cornutam quasi exemplum insolitæ turpitudinis feligere; quæ sane vel ipsa *Pipa* seu *Surinamen*si foedior est et monstrosior. Non possumus illam non horrescere et averfari frontem intuentes quasi cornua gerentem, summas nempe palpebras in mucronem callosum productas, orisque immodicam amplitudinem, hiatumque ultra solitum immanem. Rarissima est rana cornuta. Americam

Septen-

Septentrionalem inhabitat, et in Virginia potissimum invenitur. Color generalis est fusco-virescens, fasciis latis albicantibus longitudinalibus per dorsum ductis. Cutis quoque corporis superioris tuberculis aculeatis contexta est. Crura fusco transversim fasciata sunt.



THE HORNED FROG.



GENERIC CHARACTER.

Body four-footed, naked, without tail.

Lip. Syst. Nat.

SPECIFIC CHARACTER,

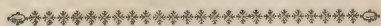
FROG with horned eyelids.

Should inquiry be made, which is the ugliest animal yet known to exist? the creature here represented might perhaps with justice be proposed as an answer: an animal of such prodigious deformity as even to exceed in this respect the Surinam toad, or *Rana Pipa*. What gives an aspect so peculiarly forbidding to the present species is the horned appearance of the front, which is caused by a sharp-pointed elongation of the upper part of each eyelid into a callous process resembling a horn: to this may be added the excessive width of the mouth, which exceeds that of every other known species of *Rana*. This animal is extremely rare, and is a native of some parts of North America. It is principally found in Virginia. Its general colour

is

is a greenish brown, with broad longitudinal stripes of whitish on the back, and the skin on the upper part of the body is covered with a kind of spiny tubercles: the legs are transversely fasciated with brown.

PAPILIO HELENA.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ (sedentis) erectæ sursumque conniventes.

(*Volatu* diurno.)

Lin. Syst. Nat. p. 744.

Eq. Tr.

CHARACTER SPECIFICUS, &c.

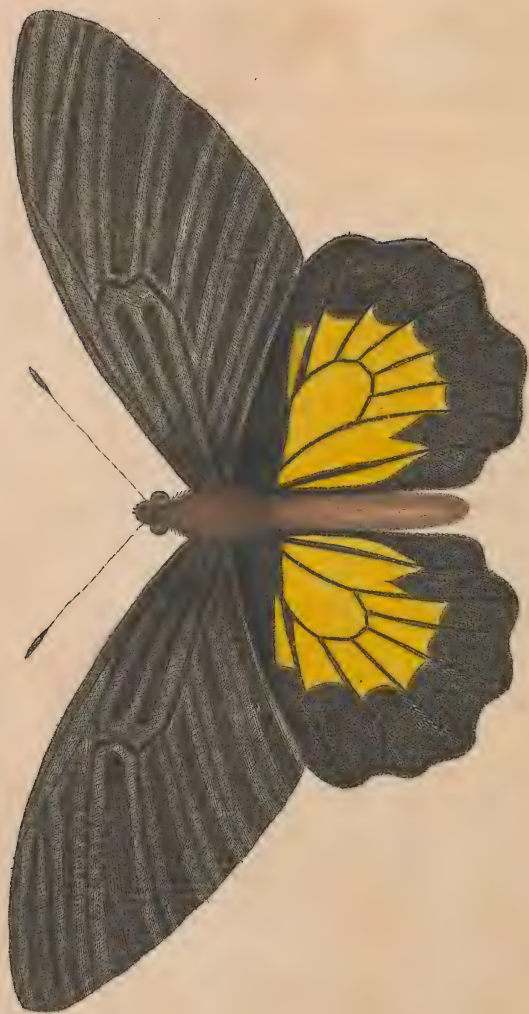
PAPILIO alias dentatis atris concoloribus : posticis disco communi aurato.

Lin. Syst. Nat. p. 748.

Clerk. ic. t. 22. f. 1.

Fabr. Spec. Inf. 2. p. 10.

Papilionem Helenam, vix ab ullis exoticis pulchritudine superatum, distinguit aterrimus et quasi holofericus alarum color; quarum fibræ virgis nonnullis pallidioribus et cinereis notantur. Alis utrisque inferioribus summum decus affert macula amplissima insigniter aureo-flava, venisque nigris pulcherrime striata. Americam australem incolit Papilio Helena, et præcipue in Surinamia invenitur.



London: Published & sold at 10, 11, & 12, Pall Mall, by J. E. D. Nodder, & Co. 1821. Remains. 1821.

HELENA.
OR, THE
BLACK-AND-GOLD BUTTERFLY.



GENERIC CHARACTER.

The *Antennæ*, or *Horns*, thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

The *Wings* (when sitting) erect, and meeting upwards. (*Flight* diurnal.)

SPECIFIC CHARACTER.

BLACK BUTTERFLY with both surfaces alike;
the disk of the lower wings of a brilliant
gold colour.

The *Papilio Helena*, one of the most beautiful of the exotic butterflies, is distinguished by the deep velvet black of its wings, which are marked by a few lighter or greyish stripes accompanying the fibres; while the lower wings are each ornamented by a very large spot or patch of the richest golden-yellow, traversed by several veins of black. It is a South-American insect, and is principally found at Surinam.



MEROPS SUPERBUS.



CHARACTER GENERICUS.

Rostrum curvatum, compressum, carinatum.

Lingua apice laciniata.

Pedes gressorii.

Lin. Syst. Nat. p. 182.

CHARACTER SPECIFICUS.

MEROPS RUBER, fronte, gula, uropygioque
cæruleis, rectricibus duabus intermediis lon-
gioribus.

Quamquam Meropi Brasiliensi Lathamii affinis admodum sit hæc avis, adeo tamen coloribus discrepat, ut pro distincta specie jure habeatur. Illam igitur diverso nomine signavi. In Museo Britannico asservatur pulchrum specimen unde delineata est hæc nostra figura.



THE
SUPERB BEE-EATER.



GENERIC CHARACTER.

Bill curved, compressed, carinated, and sharp pointed.

Tongue (generally) laciniated at the tip.

Feet gressorial, *i. e.* three toes forward and one backward; and the three lower joints of the middle toe closely joined to those of the outmost.

SPECIFIC CHARACTER.

RED BEE-EATER, with front, throat, and rump, blue; and the two middle tail-feathers longer than the rest.

The colours of this bird differ so much from those of the *Merops Brasiliensis* of Mr. Latham, to which it is yet extremely nearly allied, as to justify its being regarded as a distinct species. I have therefore called it by a different title. The beautiful specimen from which the present figure was taken is preserved in the British Museum.

MADREPORA FUNGITES.



CHARACTER GENERICUS.

Animal *Medusa*.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, 'Ec.

MADREPORA simplex acaulis convexa, subtus
plerumque concava, interdum convexa et
pedunculata.

FUNGUS LAPIDOSUS.

Clus. exot. 125. f. 1.

FUNGUS LAPIDEUS.

Buch. hist. 3. p. 801. f. 1, 2.

Cum anteaetis temporibus, dormiret recentiorum philosophorum curiosa sedulitas, quæ jam fere per totum orbem feliciter diffunditur; nugis et fabellis anilibus sæpius credebatur, vetuitque plurimorum hominum hebes incuria ut vel ampla esset speciminum supellex, vel etiam nactorum plena et genuina descriptio. In plantis igitur et animalibus indies erratum est. Radix filicis in septentrionali Asia satis vulgaris naturam cum quadrupede participare diù censebatur, vocabaturque communiter

niter *agnus vegetabilis*. Gryllorum certæ species exoticæ quibus alæ sunt amplæ, virides, et venosæ, folia animata habebantur: nec defuere qui serio et pertinaciter asseruerunt arborum quarundam Indicarum et Americanarum, simul ac deciderant folia, subito alis pedibusque gaudentia circa ipsam arborem volitare. Coralium quoque, seu Madreporam in tabula depictam, fungum esse, five agaricon in lapidem conversum opinabantur tunc temporis physici. Ignoscendum est sane huic errori potius quam aliis multis, cum Madrepora agarico simillima plerosque spectatores (exceptis paucis, quibus res penitus scrutari cordi est) posset decipere. Compti sunt tandem in India Orientali, ubi frequentior est Madrepora, seduli examinatores, esse eam fulcrum seu habitaculum substantiæ gelatinosæ et animatæ, forma ad *Medusas* ut vocantur, orbiculatas et depressoas accedentis. Efficit animal mirandum hoc domicilium, materiem calcariam glutinosam ab omni corporis parte copiose exprimendo; ita ut fulci seu depressiones in Madrepora, lamellis totidem acutis et radiatis in ipsius animalis corpore respondeant; quod cum sit tenerimum, aeri expositum in meram pelliculam paucis horis decrefcit, nec nisi in aqua marina, qua nascitur, probe potest examinari. In nonnullis speciminibus ex parte inferiore, seu concava, proles minor varia protruditur. In India præcipue Orientali invenitur Madrepora Fungites, crescitque interdum ad magnitudinem sex unciarum in diametro, interdum vix unam superat. Color albus non caret elegantiâ, totaque superficies exterior tuberculis minutissimis leviter exasperatur. Lamellarum margines interrupto ordine serratæ sunt.



THE MUSHROOM MADREPORE.



GENERIC CHARACTER.

The *Animal* resembling a Medusa.

The *Coral* marked by lamellated star-shaped cavities.

SPECIFIC CHARACTER.

MADREPORE with rising or convex laminæ above, generally concave and papillose beneath, and sometimes footstalked.

Before that spirit of inquiry which characterizes the modern cultivators of natural history began to diffuse itself in Europe, innumerable errors were committed in the histories both of animals and vegetables, while the general neglect with which the major part of mankind regarded subjects of this nature, still increased the difficulty of obtaining proper specimens and descriptions of several of the most curious and interesting productions of nature. The root of a species of fern, not uncommon in the northern parts of Asia, was supposed to partake of the nature of a quadruped, and was dignified by the title of the vegetable lamb. Some of the locust tribe with large green veiny wings were believed

to be animated leaves; and there were not wanting those who were ready to vouch the certainty of the leaves which fell from several trees in India and America becoming suddenly furnished with legs and wings, and soon after fluttering round the branches of the tree which gave them birth; while the coral which forms the subject of the present plate was regarded as a species of petrified mushroom. It must be confessed that of all erroneous ideas this was one of the most plausible; for so very striking is the general resemblance which this coral bears to the genus *Agaricus*, that it is impossible not to be forcibly impressed with the similarity of the structure. From observations, however, which have been made in those parts of India where it is commonly found, it appears to be the production of an animal of a soft or gelatinous nature, and which bears a general affinity to the shape of the orbicular depressed *Medusæ* or Sea-Blubbers. The animal forms this curious fulcrum or habitation by secreting a copious deposition of calcarious matter from every part of its body, and the fulci or furrows in the Madrepore answer to so many sharp radiated laminæ of the creature's body. So tender is this animal, that it collapses and shrinks to a mere pellicle when exposed for some hours to the air; so that it is only in the sea-water that it can be viewed to advantage. Some specimens of this Madrepore are proliferous, or have young productions of the same form growing from several parts of the concave or lower surface. The *Madrepora Fungites* is found of various sizes, from an inch to six inches in diameter. Its colour is an elegant white, and every part of the
external

external surface is roughened by small protuberances, and the edges of the lamellæ or gills are irregularly serrated. It is principally found on the coasts of the East Indies.

SCARABÆUS GOLIATUS.



CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, ♂.

SCARABÆUS scutellatus, thorace inermi, clypeo bifurco.

Fabr. Spec. Ins. tom. 1. p. 14.

Drur. Ins. 1. tab. 31. ♂ 3. tab. 40.

Voet. Scar. tab. 22. fig. 51.

Scarabæus Goliatus, fui generis fere rarissimus, Africam incolit, præcipue Guineam. Coloribus variat; thorace interdum roseo nigris lineis variato, elytrisque purpureo-ferrugineis; interdum tum thorace tum elytris albido-flavescentibus, nigro interstinctis. In elegantissimo opere Domini Drury primo depicta est hæc scarabæi species.



THE FORK-HEADED BEETLE.



GENERIC CHARACTER.

Antennæ divided at the tip, or head, into several lamellæ.

Tibiæ, or second joints of the fore-legs, generally toothed.

SPECIFIC CHARACTER.

BEETLE with plain thorax striped with black, and forked head.

The *Scarabæus Goliatus*, one of the rarest of its genus, is a native of Africa, and is principally found in Guinea. It is a species which varies much in colour; some specimens having the thorax rose colour, striped with black, and deep-ferruginous or purple-brown elytra, or wing-cases, while in other specimens both thorax and elytra are of a dull yellowish white, or cream-colour, striped and varied with black. This curious insect was first figured in the elegant work of Mr. Drury.

TROCHILUS MULTICOLOR.



CHARACTER GENERICUS.

Rostrum subulato-filiforme, apice tubulato, capite longius: Mandibula superior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubulosa.

Pedes ambulatorii.

Lin. Syst. Nat. p. 189.

CHARACTER SPECIFICUS, &c.

TROCHILUS curvirostris fuscus, vertice, gula, pectore, humerisque, viridi-aureis, abdomine rubro, genis cyaneis.

TROCHILUS MULTICOLOR.

Lath. ind. orn. p. 308.

Gmel. Syst. Nat. p. 490.

Trochilus Multicolor, variis ditissimus coloribus, inter rarissimas sui generis species habetur. Depingitur figura nostra a specimine pulcherrimo quod suppeditavit Museum Britannicum. Americam Australem incolit hæc avicula.





London, Published 1841, by T. P. Agnew & Sons, 15, Broad Street.

THE
HARLEQUIN HUMMING-BIRD.



GENERIC CHARACTER.

Bill slender, tubular, the upper mandible sheathing the lower.

Tongue very long, missile; formed of two conjoined cylindric tubes.

Toes three forward, one backward.

SPECIFIC CHARACTER, &c.

Curve billed brown Humming-Bird, with gold-green crown, throat, breast, and shoulders, red belly, and blue cheeks.

HARLEQUIN HUMMING-BIRD.

Lath. Synops. 2. p. 760.

The *Trochilus Multicolor*, or Harlequin Humming-Bird, so remarkable for the diversity of its colours, is one of the rarest of its genus. The figure here represented is taken from the beautiful specimen in the British Museum. This bird is a native of South America.



ISIS NOBILIS.



CHARACTER GENERICUS.

Stirps lapidea, rigida.

Flores Hydræ e poris lateralibus.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina æquali continua, striis obsoletis obliquis, ramis vagis.

Lin. Syst. Nat. p. 1288.

CORALLIUM RUBRUM.

Baub. pin. 366.

GORGONIA PRETIOSA.

Ellis. Zooph. p. 90.

Isis nobilis, seu Corallium vulgare rubrum, e substantiis illis marinis est quæ, communi fere physicorum recentium consensu, ab animalibus hydras seu polypos quodammodo referentibus effingi creduntur. Degunt hæc animalia in cavitatibus istis quæ in cortice corallii molli et subereo frequenter conspiciuntur; eorumque vestigia paulatim distantia punctisque similia in superficie etiam durissima imprimuntur, omnibus corallii ipsius ramusculis striis longitudinalibus ab ipsa basi extrinsecus notatis. Fatendum sane est non mediocri fide opus esse ut omnia Lithophyta ab animalibus incolentibus

bus revera et omnino formari persuasum habeamus. Cum vero nostrum non sit notissimas Domini Ellifii observationes in dubium vocare, gaudeant volumus lectores suis sententiis, statuantque ipsi an inter animalia an vegetabilia substantias hasce satius sit numerare: ad utraque enim miro modo videntur pertinere. Notandum est specimina corallii rubri, quo formosiora videntur, cortice exteriori, ut plurimum, denudari. Depingitur igitur ramulus cortice obductus juxta ipsam naturam. *Fig. 2.*



London, Published Oct: 1790 by F. & J. Nodding & Co. V. 15. Brewer Street.

RED CORAL,



GENERIC CHARACTER.

- The *Coral* having the habit or appearance of a plant.
- The *Stem*, or internal part, differing in the different species, and generally either of a horny or a stony appearance.
- The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

BRIGHT-RED STONY-BRANCHED CORAL, with longitudinal striæ.

COMMON RED CORAL.

The *Isis nobilis*, or common red Coral, is one of those numerous submarine productions which, by the almost general consent of modern naturalists, are regarded as the fabrication of animals resembling polypes, which reside in the cavities so constantly seen in the soft or cortical part of the coral; and the impressions or vestiges of which are visible even on the surface of the hard part or the coral itself; being generally seated at distant intervals, and appearing like small impressed spots, while
the

the whole coral, throughout all its ramifications, is marked externally by longitudinal striæ proceeding from the very base itself. It must be candidly confessed that a good share of philosophical faith is necessary to reconcile us to the idea of all the coral tribe being entirely the work of animals: yet as we cannot presume to controvert the well-known observations of Mr. Ellis, we shall leave our readers to their own opinions, and at perfect liberty to regard these curious substances either as belonging to the animal or vegetable kingdom, to both of which they seem to be strangely allied. It is necessary to observe that the specimens of red coral as generally seen, have, in order to increase the beauty of their appearance, been deprived of their cortical or exterior coat. A branch in its natural state, or with its exterior coat, is represented at *fig. 2.* in the annexed plate.

LACERTA VARIA.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

CHARACTER SPECIFICUS,

LACERTA cauda longa carinata, corpore maculis transversis variis.

Tam prope accedit hæc lacerta ad illius similitudinem quam Linnæus nomine *Monitoris* descripsit, ut dubium forsan sit an species vere sit distincta, seu illius tantum varietas. Corpus uncias circiter quindecim longum est, caudaque multo longior. Color niger est, notis, striisque flavis, imparibus, per corpus transverse discurrentibus. Super crura sunt series transversæ macularum rotundarum, caudaque fasciis latis nigris flavisque alternatim interstingitur. In nonnullis speciminibus color flavus pallidior multo est quam in aliis, et fere albescens. Plurima hujus lacertæ specimina novissimis a Nova Hollandia navigiis in Angliam illata sunt.



THE VARIEGATED LIZARD.



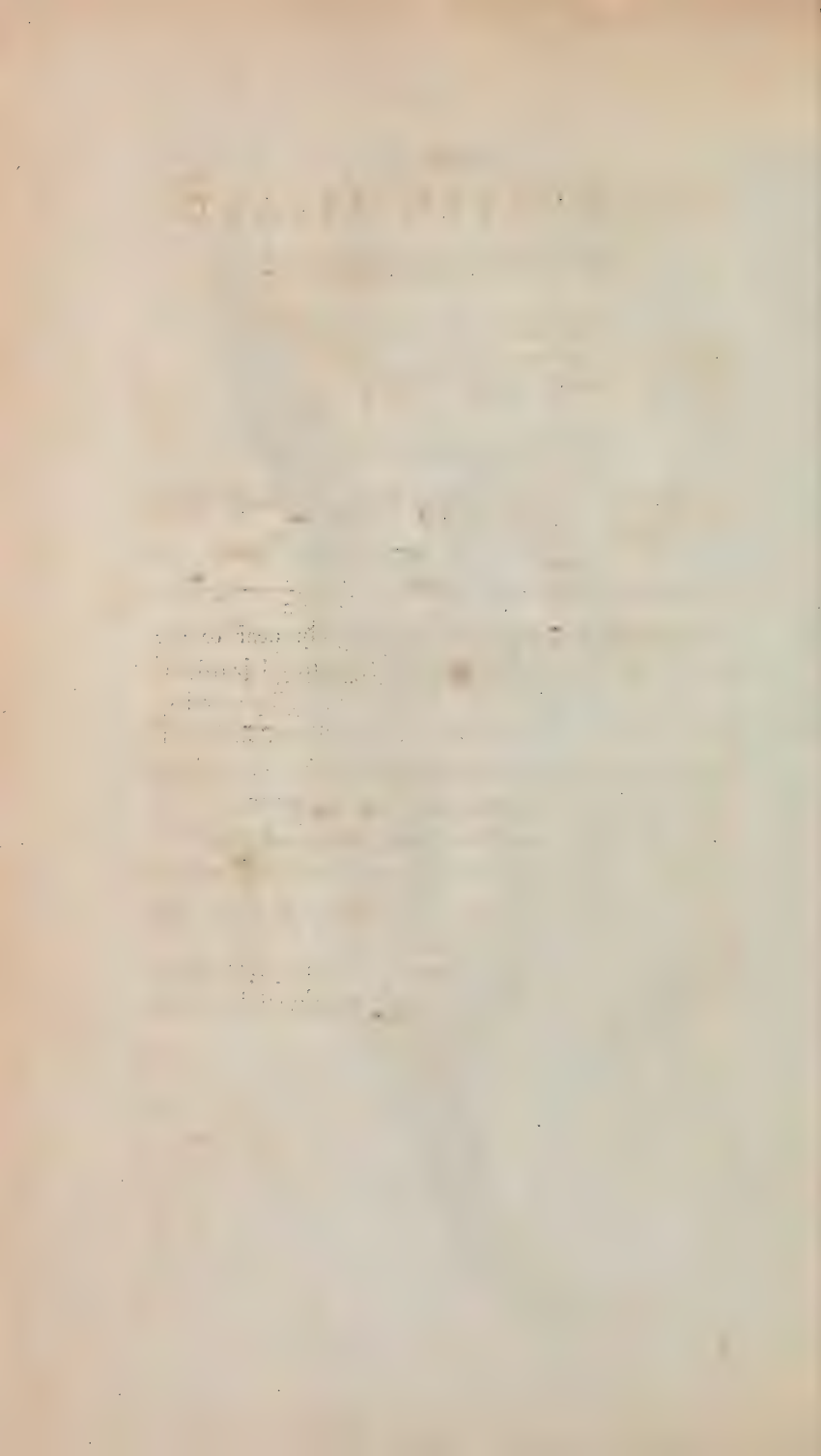
GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

LIZARD with long carinated tail, the body transversely variegated.

This Lizard approaches so extremely near to the *Lacerta Monitor* of Linnæus, or *Monitory Lizard*, as to make it doubtful whether it be not in reality a variety of that species. The body is about fifteen inches in length, and the tail is considerably longer. The animal is of a black colour, variegated with yellow marks and streaks of different shapes, and running in a transverse direction. On the legs are rows of transverse round spots; and on the tail broad alternate bars of black and yellow. In some specimens the yellow is much paler than in others, and nearly white. Several specimens of this species were brought from New Holland during the late voyage from Botany Bay.



TETRAO PORPHYRIO.



CHARACTER GENERICUS.

Macula prope oculos nuda, papillofa.

Lin. Syst. Nat. p. 273.

CHARACTER SPECIFICUS, &c.

TETRAO VIOLACEO-NIGRICANS, viridi
fuffufus, alis fusco-ferrugineis, crista com-
presso-erecta ferrugineo-rubente,

LE ROULOUL DE MALACCA.

Son. Voy. Ind. vol. 2. p. 174. pl. 100.

Genus *Tetrao* numerosum varias species complectitur quæ nominibus perdicum, urogallorum, coturnicum, &c. communiter vocantur; pertinetque ad divisionem gallinaceam, quæ scilicet continet omnes illas aves quæ forma vivendique modo ad gallum gallinaceum plus minus accedunt. Tetraonum plures exotici sunt; maxima pars extra Europam nutritur. Species de qua jam loquimur, ut fileamus inusitatum colorem, generis sui est rarissima. Notandum præterea est characteres illi esse incertos; ut ad genus *Columbæ* non minus quam *Tetraonis* pertinere videatur; præsertim si specimen exsiccatum inspicias. Figura hæc nostra ab ipsa ave viva fideliter depicta est. Palpebris peculiare quoddam est;

F

margo

margo n  mpe crenis parvulis ruberrimis et exstantibus ornatus. Crista quoque mollissima et quasi serica. Peninsulam Malaccam, variasque Indi   Orientalis insulas inhabitat Tetrao Porphyrio. Observandum est in aliquibus speciminibus, (maribus fortasse,) exstare in basi frontis fetas aliquot nigras, qu   in hoc specimine defuere. Notandum quoque est hanc avem, quamvis in genere adeo diverso, in multis similem esse Cuculo Pers   Linn  i.



THE VIOLACEOUS PARTRIDGE.



GENERIC CHARACTER.

Eyes (generally) bounded, either above or on one side, by a granulated red skin.

Bill convex, short, and strong.

SPECIFIC CHARACTER, &c.

VIOLACEOUS-BLACKISH PARTRIDGE

with a cast of green, ferruginous-brown wings, and compressed, upright, ferruginous-red crest.

LESSER-CROWNED PIGEON.

Latb. Syn. vol. 2. p. 622.

The numerous genus *Tetrao*, comprehending all the species of Grouse, Partridge, Heathcock, &c. belongs to the order called *Gallinæ*, or such as in their general characters and appearance make some approach to the common Cock, or Phasianus Gallus of Linnæus. By far the major part of the Tetraones are exotic birds; and indeed most of them are extra-European birds. The present species, exclusive of its unusual colour and peculiar elegance, is likewise remarkable for being one of the rarest of the genus: it is also to be observed,

F 2

that

that from a kind of ambiguity in its appearance, it may seem to bear almost as much affinity to the genus *Columba* as to that of *Tetrao*; and indeed in a dried specimen it is not easy to decide with absolute precision to which genus it should with the greatest propriety be referred. The present figure was taken from the living bird, and exhibits with great fidelity its several characters. The eyelids are singularly formed; being regularly surrounded by a series of rising crenatures of the most vivid scarlet. The crest also, which is of a structure peculiarly delicate, adds greatly to the beauty of the bird. It is a native of Malacca, and some of the East-Indian islands. It should be observed that in some specimens, (perhaps males,) a certain number of long, black, rising bristles appear, seated at the base of the front: these in the present specimen were wanting. It may be added, that notwithstanding the difference of its genus, this bird bears a striking affinity with the *Cuculus Persa* of Linnæus.

PHALANGIUM CANCROIDES.



CHARACTER GENERICUS.

Pedes octo.

Oculi verticis duo contigui, duo laterales.

Frons antennis pediformibus.

Abdomen rotundatum.

Lin. Syst. Nat. p. 1028.

CHARACTER SPECIFICUS, &c.

PHALANGIUM abdomine obovato depresso, chelis lævibus : digitis pilosis.

Lin. Syst. Nat. p. 1028.

CHELIFER abdomine lineis transversis.

Geoffr. Paris. 2. p. 618.

SCORPIO MINIMUS.

Roefel. 3. Supl. t. 64.

Animalculum hoc, physicis diu cognitum, diversis temporibus ad diversa genera retulerunt entomologi. Laboriosus celeberrimusque Swammerdamus quasi scorpionis speciem descripsit. Idem fecit Roefelius. Quamquam in editione duodecima Systematis Naturæ Linnaeus in genere Phalangii posuerit, in Fauna tamen Suecica ab eodem auctore conscripta, inter acaros numeratur. Ingeniosus Degeer genus illi distinctum nomine Cheliferi

Cheliferi instituit. Fabricius denique in *Systemate Entomologico* iterum ad genus *Scorpii* amandavit, cui fortasse conjunctius est quam ulli alii. Magnitudine multum variat hoc insectum: quæ enim in Anglia inveniuntur specimina, multo minora sunt quam in Sebæ, Swammerdami, et Roesslii operibus depicta. Figura microscopica in hac nostra tabula accuratissime delineatur. Altera quæ disjungitur, caput et thoracem amplitudine admodum aucta ostendunt, ut partes pectinatæ appareant; quæ quamvis situ diversæ, formam tamen fere eandem habent ac in scorpiis. Figura 1. magnitudinem naturalem insecti, ut in Anglia conspicitur, monstrat. Accusat hoc insectum Linnæus, sed (ut mihi videtur,) injuria, cutim interdum penetrandi, papulamque magnitudine pisi, summo cum dolore excitandi. Circa parietes antiquos, ut plurimum invenitur, et interdum inter papyram, &c. conspicitur. Inter insecta quoque rariora non immerito numeratur.



I. 藏



THE
CANCROID PHALANGIUM,



GENERIC CHARACTER.

Eight *Legs*.

Two vertical and two lateral *Eyes*.

Antennæ resembling legs.

Abdomen rounded.

SPECIFIC CHARACTER.

PHALANGIUM with obovate depressed abdomen, and smooth chelæ, slightly hairy at the tips.

This little insect, which has long been known to naturalists, has been occasionally referred to very different genera. The celebrated and laborious Swammerdam has described it as a species of Scorpion. In the works of Roesel it is also regarded as a Scorpion. In the twelfth edition of the *Systema Naturæ* of Linnæus it is ranked under the genus Phalangium; while in the *Fauna Suecica* of the same author it is made an *Acarus*. The ingenious Degeer institutes for it a separate genus under the name of Chelifer. Lastly Fabricius in his *Systema Entomologiæ* has remanded it to the genus Scorpio, to which perhaps it is more nearly allied than to any other. This insect seems to vary considerably in size; those
which

which are found in our own country being much smaller than the representations given by Swammerdam, Roefel, and Seba. The microscopical figure in the annexed plate is executed with the greatest accuracy. The separate figure represents the head and thorax very much magnified, in order to shew the pectinated parts, which though differing in situation, are nearly of the same form as in scorpions. Fig. 1. shews the natural size of the English specimens. Linnæus accuses it (I believe most unjustly,) of sometimes getting under the skin, and raising a painful tumour. It is generally found on old walls, and sometimes amongst papers, &c., and is not a very common insect,

AMPHISBÆNA ROSEA.

Var. A. Albæ.



CHARACTER GENERICUS.

Annuli trunci caudæque.

Lin. Syst. Nat. p. 392.

CHARACTER SPECIFICUS.

AMPHISBÆNA annulis trunci circiter 223;
caudæ 16.

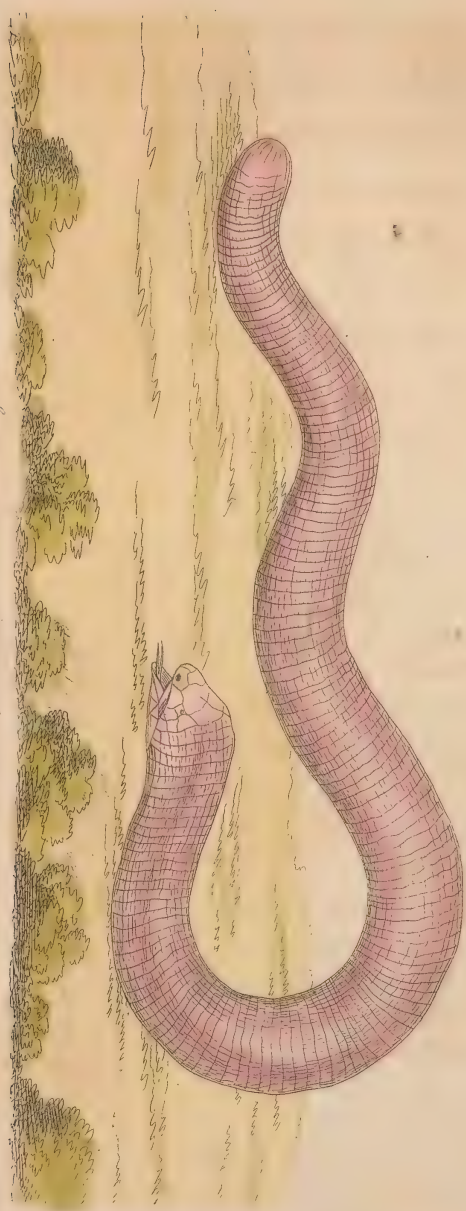
Generis Amphisbænæ perpaucae quæ noscuntur species a plerisque serpentibus tantum differunt, ut eas primo visu vermes potius quam angues putemus: squamis enim penitus carent, quarum in loco corpus cingunt annuli seu spatia circularia æque distantia, quæ striis innumeris in longitudinem ductis decussantur. Caput in areas paucas dividitur, squamis majoribus in pleroque colubrino genere non absimiles; caudaque non sensim attenuata, sed vix a proportionem cæteri corporis recedens, apiceque valde obtuso seu rotundato. Orta est ab hac forma vulgaris opinio, Amphisbænæ duo esse capita, unum scilicet in utraque extremitate: cum enim oculi adeo minuti sint ut primo visu non distinguantur, eo fit ut inter caput et oppositum extremum ambiguum sit discrimen. Hujus generis species maxima est Amphisbæna alba; ob colorem pallidulum, gil-

G

vum

vum scilicet, seu fere album, sic nominatā. Colore
tamen est interdum pulcherrime roseo, qualis in tabula
depingitur. Non raro pedali est longitudine. Ameri-
cā incolit et plane innocuus est serpens.

London: published by W. & A. Groom, 1878. 1st. 2nd. 3rd. 4th. 5th. 6th. 7th. 8th. 9th. 10th. 11th. 12th. 13th. 14th. 15th. 16th. 17th. 18th. 19th. 20th. 21st. 22nd. 23rd. 24th. 25th. 26th. 27th. 28th. 29th. 30th. 31st. 32nd. 33rd. 34th. 35th. 36th. 37th. 38th. 39th. 40th. 41st. 42nd. 43rd. 44th. 45th. 46th. 47th. 48th. 49th. 50th. 51st. 52nd. 53rd. 54th. 55th. 56th. 57th. 58th. 59th. 60th. 61st. 62nd. 63rd. 64th. 65th. 66th. 67th. 68th. 69th. 70th. 71st. 72nd. 73rd. 74th. 75th. 76th. 77th. 78th. 79th. 80th. 81st. 82nd. 83rd. 84th. 85th. 86th. 87th. 88th. 89th. 90th. 91st. 92nd. 93rd. 94th. 95th. 96th. 97th. 98th. 99th. 100th.



THE
ROSE-COLOURED AMPHISBÆNA.



GENERIC CHARACTER.

The whole animal marked by annuli or circular segments.

SPECIFIC CHARACTER.

AMPHISBÆNA with the annuli of the body amounting to about 223; of the tail 16.

The animals of the genus *Amphisbæna*, which contains but very few species, differ so much from the major part of the serpent tribe, as to be almost liable, on a cursory view, to be mistaken for worms rather than snakes; being totally destitute of scales; instead of which the whole animal is marked with equidistant annuli, or circular spaces furrounding the body, and deussated by an infinite number of longitudinal divisions or striæ. The head is marked with a few large divisions or spaces analogous to the large scales in the major part of the genus *Coluber*; and the tail, instead of tapering gradually, is scarce distinguishable from the proportion of the rest of the body; and is extremely obtuse or rounded. This peculiarity of shape in the genus *Amphisbæna*, gave rise to the erroneous idea of the *Amphisbæna* being furnished with a head at each extremity:

mity: for as the eyes are very small, and at first view inconspicuous, the head bears no striking mark of distinction from the opposite extremity. The largest species of this genus, is the *Amphisbæna alba*; so called from its colour; which is a very pale cream-colour, or nearly white: it sometimes however occurs of a beautiful rose-colour, in which state it is represented on the annexed plate. The *Amphisbæna alba* is frequently seen of at least a foot in length. It is a native of America, and is perfectly harmless.

XIPHIAS PLATYPTERUS.



CHARACTER GENERICUS.

Caput maxilla superiore terminatum rostro ensiformi.

Corpus alepidotum.

CHARACTER SPECIFICUS, &c.

XIPHIAS pinna dorsi latissima, appendicibus pectoralibus acuminatis longissimis.

GUEBUCU.

Marcgr. bras. l. 4. c. 15. p. 171.

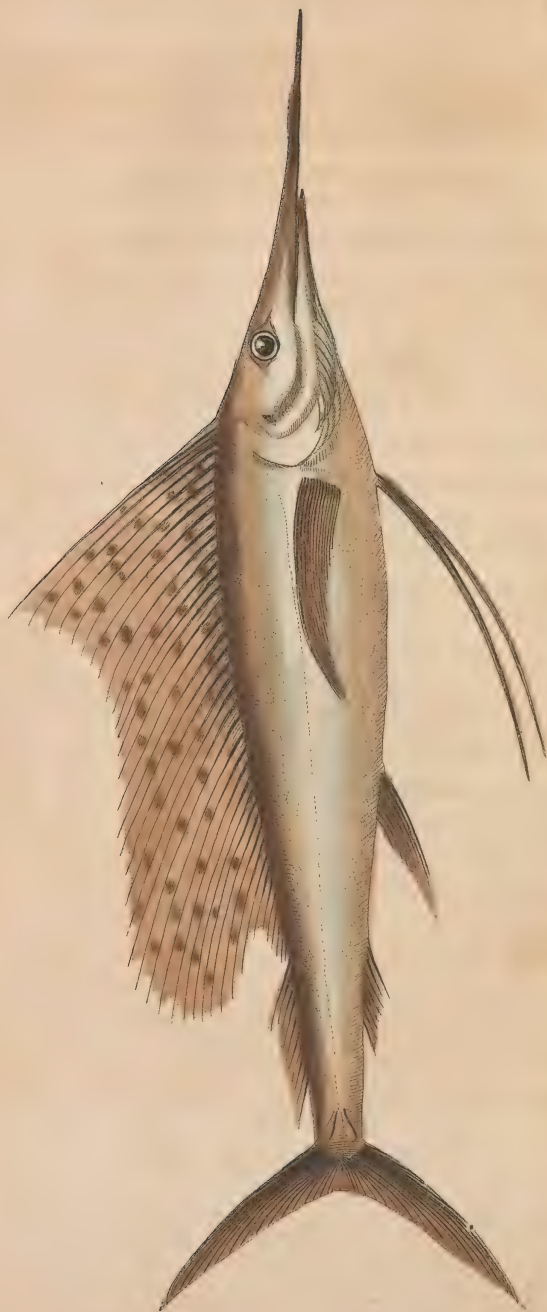
Monstrum fortasse nullum hoc insignius generat oceanus vel Indicus vel Pacificus. Si rostrum spectemus peracutum et velut ensiforme, Xiphiæ communi physicis optime cognito affine putemus: cum tamen ab illo variis notis discrepet, speciem omnino diversam habeamus necesse est. Longitudo illi est viginti pedum; interdum multo major. Piscem hunc primus descripsit Marcgravius in historia sua Brasiliensi, qui etiam figuram addidit, certe non elegantem, quæ tamen ipsum animal satis accurate exprimit. Color generalis est sub-cæruleo-argenteus, dorso superiori, capite, caudaque exceptis, quæ insigniter fusca sunt. Pinna dorsi magna fusco-pallescit, maculis rotundatis plurimis ni-

gerrimis notata. Specimen ipsissimum, quo forsā nū-
lum pulchrius et perfectius, unde figura hæc nostrā
delineata est, in Museo Britannico asservatur, cui dono
dedit illustris ille physicus JOSEPHUS BANKS, Baronet-
tus; ad quem tribus circiter abhinc annis, venerunt
literæ a Præfecto navis Indicæ, robur fere incredibile
piscis describentes, afferentesque illum densam et soli-
dam navis carinam rostro penitus transfixisse. Mortem
ipsi Xiphie conscivit ictus violentia. Fausse admodum
evenit non potuisse piscem rostrum reducere; quod si
fecisset, perdita esset navis immissa aqua. Rostrum ip-
sum ligno infixum in Museo Britannico conspici potest.
Non solum maria Indica et Australia, sed etiam Septen-
trionalia incolit Xiphias Platypterus. Fertur eum ba-
lænis esse inimicissimum, cumque iis sæpius acerrime
pugnare. Notatu dignum est loqui Plinium de navibus
Xiphie perfoctis; quod tamen inter fabulas veterum
physicorum semper habitum est. Cum vero ita se rem
revera habere intra paucos annos variis exemplis certif-
sime compertum sit, probabile est Plinium, inscium
licet, de hac ipsa specie locutum esse, quæ tunc tem-
poris a Xiphia communi minus accurate distincta est.

The Watertord Chronicle

SATURDAY, NOV 11, 1893

THIS DAY'S TELEGRAMS



London, Published Decree by J. R. Nodden & Co. N. 3. Brown Street.

THE
BROAD-FINNED SWORD-FISH.



GENERIC CHARACTER.

Head furnished with a sword-shaped snout or upper jaw.

Body without apparent scales.

SPECIFIC CHARACTER.

SWORD-FISH with extremely broad back-fin, and very long sharp-pointed thoracic appendages.

Amongst the monsters of the deep which inhabit the Indian and Pacific oceans, the fish here represented is one of the most remarkable. From the appearance of the long and sharp-pointed process of the head, it appears, on a cursory view, very nearly allied to the Sword-fish, already so well known to naturalists. It differs, however, in several particulars, from the common or European Sword-fish, and can by no means be regarded as the same species. This extraordinary fish is found of the length of twenty feet, or sometimes much longer. It was first described by Marcgrave, in his History of Brasil, who has illustrated his description by a figure, which, though not possessing any degree of elegance, is yet sufficient

to ascertain the animal. The general colour of this fish is a silvery blueish white, except on the upper part of the back, the head, and the tail, which are of a deep brown. The back-fin is of a pale brown, finely spotted with roundish marks of deep black. The skin is smooth, and without any appearance of scales. The specimen from which the present figure was taken, is an uncommonly fine one: perhaps the most complete and perfect ever seen in Europe. It is now in the British Museum, to which collection it was presented by Sir JOSEPH BANKS, Bart. President of the Royal Society. About three years ago a letter was sent to the President, from the captain of an East-Indiaman, accompanied by an account of an astonishing instance of the powerful strength which this fish occasionally exerts: the bottom of the said ship having been pierced through by a fish of this species, in such a manner that the sword or snout was completely imbedded or driven through, its whole length, and the fish killed by the violence of the effort. A most singularly fortunate circumstance for the preservation of the vessel! which, had the fish been enabled to have withdrawn its snout, must inevitably have foundered in consequence of the leak. The wood, together with the sword imbedded in it, is now in the British Museum. This fish is found not only in the Brazilian and East-Indian seas, but also in the Northern ocean. It is said to be a great enemy to whales, with which it is reported to have frequent combats! It is remarkable that Pliny mentions the circumstance of the Sword-fish being able to transfix vessels; which has generally been regarded as one of those exaggerations

so frequent in the works of the ancient naturalists ; but as the present fish is well known to possess this power, (several other equally-well authenticated accounts having been received within these few years,) it is surely no improbable supposition, that Pliny, though not conscious of the difference, in reality spoke of this very species, which at that time was doubtless confounded with the common Sword-fish.

LACERTA UNISTRIATA.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

CHARACTER SPECIFICUS, &c.

LACERTA FUSCA, subtus pallidior, linea dorsuali albida, super caput furcata, digitis unguiculatis, subtus, lamellatis.

LACERTA VITTATA ?

Gmel. Syst. Nat. 1. p. 1067.

Rarissima est hæc lacerta, nec certum est annon adhuc unquam descripta sit. Inter species Linnæanas frustra requiritur, nec non in numerofo horum animalium agmine quæ suppeditat Thesaurus Sebæ. Quantum colligere possum a speciminibus quæ egomet inspexi, longa est, ut plurimum, sex uncias, interdum ad novem pertingens. Color est languide fusco-flavescens, ochræ similis, subtus pallidior. Cauda gilva notis longitudinalibus fuscis variatur. Per dorsi longitudinem late discurrit linea insignis albo-gilva, quæ ab utroque latere capitis furcæ instar, divaricat; extremitatibus oculis tenuis protensis. Cutis tuberculis, præsertim versus caudam, levitur exasperatur, quæ minutissima cum sint, non nisi attento oculo conspici queant. Simillima
est

est illi hæc species quam Linnæus nomine *Gecko* distinxit. In figura nostra exhibetur animal magnitudine ipsius speciminis; sed in figura 1. augetur paululum pars inferior pedis, ut transversæ lamellæ clarius distinctiusque inspiciantur.



THE SINGLE-STRIPED LIZARD.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

BROWN LIZARD, paler beneath, with a white dorsal line forked over the head, and unguiculated feet, lamellated beneath.

This species of *Lacerta* is extremely rare, and it may be doubted whether it has yet been described. It certainly is not a Linnæan species, nor does it occur in the numerous collection of Seba. The size of the specimens which I have examined is rather small, viz. from about six to nine inches in length. The colour is a soft yellowish brown, paler beneath: the tail is cream-coloured, varied with longitudinal marks of brown, and on the back of the animal is a very remarkable white, or rather cream-coloured broad line, which divides on each side the top of the head in the manner of a fork, the extremities of each division just reaching to the eyes. The skin of this Lizard, when closely examined, is slightly exasperated, especially towards the tail, with minute tubercles, but they are so extremely small that they are not perceptible without a close examination. The feet are transversely lamellated beneath.

The

The species to which this animal seems to bear the greatest affinity is the *Lacerta Gecko* of Linnæus. The figure here given represents it of its natural size; and at fig. 1. is represented the under part of one of the feet, rather larger than nature, in order to shew with greater distinctness the transverse lamellæ with which it is furnished.

PSITTACUS CONCINNUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosâ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS submacrourus viridis, fronte maculaque postoculari coccineis, vertice cærulescente.

Valde affinis P. pacifico. Lath. Syn. 1. p. 252.

Novæ Hollandiæ est incola perpulchra hæc Psittaci species, et inter alias plurimas aves physicis Europæis nuperrime innotuit. Magnitudo est quasi parvi Tur-
turis.



L.V

London, Published Dec. 7. 1791. by T. P. Noddes & J. A. Co. Brewer Street.

THE
CRIMSON-FRONTED PARRAKEET



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils round, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two backward and two forward.

Linnaeus and Pennant.

SPECIFIC CHARACTER.

GREEN PARRAKEET with lengthened tail, front and spot behind the eye crimson, and blueish crown.

N. B. This species is extremely nearly allied to the Pacific Parrot of Latham. vol. 1. p. 252.

The beautiful Parrakeet figured on this plate is a native of New Holland, and is one of the numerous new species of birds very lately made known to the naturalists of Europe. Its size is that of a small turtle.

PLATALEA AJAJA.



CHARACTER GENERICUS.

Rostrum planiusculum : apice dilatato, orbiculato,
plano.

Pedēs tetradactyli, femipalmati.

Lin. Syst. Nat. p. 231.

CHARACTER SPECIFICUS, &c.

PLATALEA corpore fanguineo.

Lin. Syst. Nat. p. 231.

PLATALEA rosea.

Briss. Av. 5. p. 356. t. 30.

PLATALEA brasiliensis AJAJA dicta.

Marcgr. bras. 204.

Plataleæ leucorodiæ Linnæi, seu communi, corporis forma simillima est eximia hæc avis; coloribus autem longe discrepat: universa enim, exceptis rostro pedibusque, pulcherrime rosea est, alarum parte superiori dorsoque phœniceis. Fertur autem ætate grandior pleneque et perfecte plumata, tota esse penitus late phœnicea, vel etiam coccinea; collumque inferius torquæ seu cingulo nigro ornari. Rostrum fusco-pallet. Crura fere nigricant. Vivit eodem modo quo Platalea com-

munis, seu leucorodia, littora nempe locaque aquosa
quærens, animaliaque minora, ranas scilicet, vermes,
et alia ejusmodi depascens. Americam incolit Aus-
tra-
lem.

THE ROSE-COLOURED SPOON-BILL.



GENERIC CHARACTER.

Bill flattish, with dilated, orbicular, flat tip.

Feet 4-toed, semi-palmated.

SPECIFIC CHARACTER, &c.

SPOONBILL with crimson plumage.

SPATULE couleur de rose.

Buff. pl. enl. n. 165.

ROSEATE SPOONBILL.

Lath. Syn. 3. p. 16.

This elegant bird, which is a native of South America, in its general shape bears a near resemblance to the *Platalea leucorodia* of Linnæus, or common Spoon-bill, but differs widely in color; the whole bird, except the beak and legs, being generally of a fine full rose-colour, which on the upper part of the wings and the back, deepens almost into crimson. It is said however, that the bird, when advanced in age, and in full perfection of plumage, is entirely of a vivid crimson, or even scarlet, with the addition of a black circle or collar round the lower part of the neck. The bill is of a

pale brown: the legs blackish. In its manner of life it resembles the European or common Spoonbill; frequenting the shores and watery places, and feeding on the smaller aquatic animals, as frogs, worms, &c.

MONOCULUS POLYPHEMUS.



CHARACTER GENERICUS.

Pedes natatorii.

Corpus crusta tectum.

Oculi (plerisque) approximati, testæ innati.

CHARACTER SPECIFICUS, &c.

MONOCULUS testæ antica convexa lunata, cauda triquetra-subulata.

MONOCULUS testæ convexa futura lunata: postica dentata, cauda subulata longissima.

Lin. Syst. Nat. p. 1057.

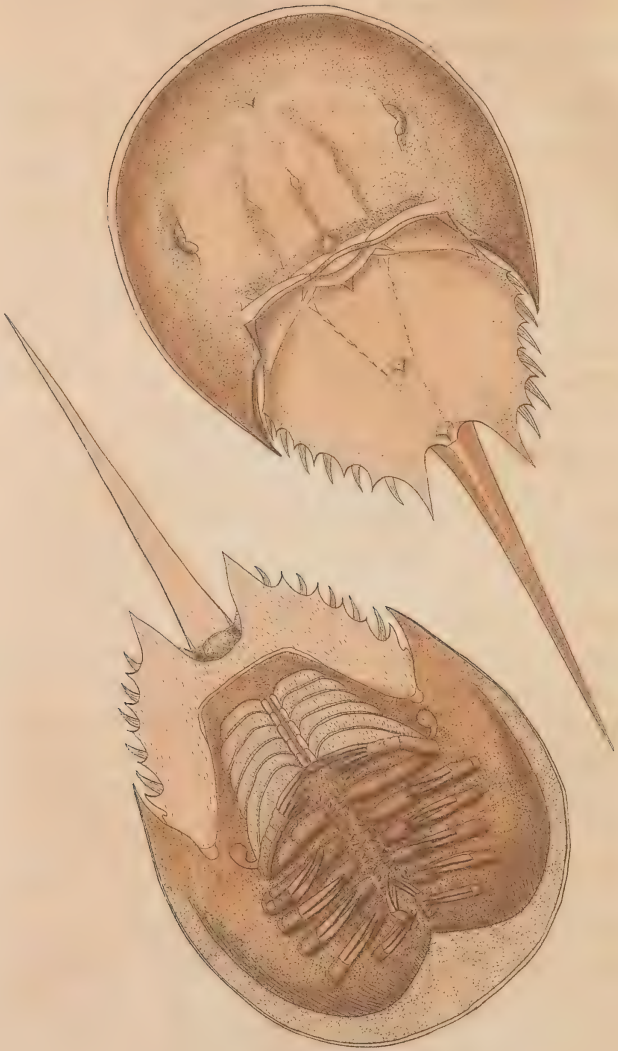
Clus. exot. l. 6. c. 14. p. 128.

Bont. jav. l. 5. c. 31.

Monoculum dicitur hoc genus, quod oculi, ut plurimum, sibi invicem adeo appropinquant, ut primo intuitu unicus esse oculus videantur. Aliquarum tamen specierum oculi, et præsertim ejus de qua jam agitur, sunt alter ab altero valde remoti. Animal quod repræsentat tabula, omnium proculdubio est maximum, quotquot inter insecta numerare hodiernis visum est physicis: est enim illi corpus, extra caudam, interdum bipedale in longitudinem. Linnæus dicit “insectorum omnium facile

facile maximum." Oceanum Indicum incolit, et, (ut fertur) bina plerumque simul conspiciuntur, scilicet mas et femina prope natantes. Pleræque hujus generis species parvula sunt infecta in aquis dulcibus viventia, quorum multa adeo sunt minuta, ut inter animalcula microscopica numerentur. Qui intimas et minus cognititas Naturæ partes scrutari solent, et innumera animalculorum agmina quibus aquæ scatent, attentius examinare, ii sane summa cum voluptate conspiciant necesse est varias hujus generis species, quæ sine ope microscopii vix videndæ, characteribus tamen genericis plane demonstrant certissimum esse illis cum ingenti et gigantea specie de qua jam loquimur, cognationis vinculum. Hæc animalcula mensibus æstivis in omnibus fere aquis stagnantibus facillime reperiuntur; eorum etiam nonnulla a scriptoribus microscopis, Bakero præcipue, non sane eleganter, satis tamen accurate delineantur, et exempla sunt miræ quoad magnitudinem differentiæ quam in ejusdem generis animalibus non possumus non observare.

Huic descriptioni Monoculi Polyphemi non abs re sit addere, quod tunica oculi externa, quæ in aliis infectis e convexitatibus innumeris basi hexagona inclusis constat, in hoc, attestante Domino André (Phil. Trans. t. 72.) e corpusculis plurimis conicis sit conflata. Possit etiam observari quod oculi multarum parvularum Monoculi specierum, ab oculis aliorum insectorum structura et aspectu differunt, et velut e pluribus oculis seu globulis tunica communi contentis, componi videntur. Notandum præterea est genus Monoculi generi Cancræ (quod astacos omnes et cancos includit) valde esse affine.



THE INDIAN MONOCULUS.



GENERIC CHARACTER.

Feet formed for swimming.

Body covered by a crustaceous shell.

Eyes (in most species) approximated, fixed in the shell.

SPECIFIC CHARACTER, &c.

MONOCULUS with the anterior part of the shell lunated, and long, triangular, sharp-pointed tail.

The INDIAN MONOCULUS, MOLUCCA CRAB, or KING-CRAB.

The name Monoculus was bestowed on this genus of insects from the circumstance of the eyes being generally seated so near each other, as, upon a cursory view, to appear as if single. In some species however, (as in the present,) it happens that they are really very remote from each other. Of all the animals which modern naturalists have agreed to distinguish by the appellation of Insects, the creature figured on this plate is by far the largest yet known; specimens being sometimes seen of two feet in length, exclusive of the tail. Linnæus calls

calls it “*insectorum omnium facile maximum.*” It is a native of the Indian ocean, and is said to be generally found in pairs, or male and female swimming together. Most of the species of *Monoculus* are small fresh-water insects, and some of them even belong to the tribe of microscopic animalcules. To those who are accustomed to penetrate into the less conspicuous provinces of Nature, and to investigate the legions of animated beings with which the waters in particular are peopled, it must afford a pleasing entertainment to view several species of this genus, which though scarce perceptible without the assistance of the microscope, yet with respect to their generic characters, bear the most striking resemblance to the gigantic species just described. These minute *Monoculi* are very common animalcules, and may be found in the summer months in almost all stagnant waters. Some of them are figured, (though not very elegantly, yet with sufficient exactness,) in Baker’s works on the microscope, and may serve as curious examples of the wonderful disparity of size which sometimes takes place in animals of the same genus.

To what has been said of the *Monoculus Polyphemus*, I should not omit to add, that the eyes in this animal, according to the observations of Mr. André, (*Phil. Transf.* vol. 72.) consist of a great number of very small cones, in which respect they differ from those of most other insects, in which the outward coat of the eye is composed of innumerable slight convexities, each bounded by an hexagonal outline. It may be proper to add, that the eyes of most of the smaller species of
Monoculi

Monoculi differ in their structure and appearance from those of the generality of insects, and seem composed of a number of smaller eyes or globular parts united by the same external tunic. It may also be observed that the genus *Monoculus* is very nearly allied to that of *Cancer*, which contains the Crab and Lobster tribe.

PAPILIO ULYSSES.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato capitatæ.

Alæ (sedentis) erectæ sursumque conniventes, (volatu diurno.)

CHARACTER SPECIFICUS.

PAPILIO alis caudatis nigris, disco cæruleo radiante; posticis subtus ocellis septem.

Lin. Syst. Nat. p. 748,

Fabr. spec. inf. 2. p. 13,

Eq. Achiv.

Clerk. ic. t. 23.

Cram. pap. 11. t. 121.

Insolitæ pulchritudinis est Ulysses. Alæ sunt nigerimæ et quasi holosericæ; area autem seu pars media plaga magna amænissime cærulea impletur, cum ad oras pertigerit radiata. Exemplo est hoc insectum papilionum caudatorum, in quibus scilicet alæ posticæ in processus seu quasi caudas excurrunt. Asia est incola Ulysses. In quibusdam speciminibus color alarum fuscus est potius quam niger. Superficies inferior nigra est, prope apices rufo tincta; alarumque posticarum oræ serie macularum ocellatarum cæruleo-rufescentium, albo nigroque fimbriatarum, decorantur.



London, Published Jan'y 1892, by F. R. Nodder & Co. 10, 12, Brown Street.

U L Y S S E S,
OR
THE RADIATED BUTTERFLY.



GENERIC CHARACTER.

Antennæ or Horns thickening towards their extremity, and generally terminating in a knob, or club-shaped tip.

Wings (when fitting) erect, and meeting upwards:
(*Flight* diurnal.)

SPECIFIC CHARACTER.

BUTTERFLY with tailed black wings, the middle-part blue and radiated, with 7 ocellated spots on the under surface of the lower wings.

This is an insect of uncommon beauty. The wings are of the deepest velvet black, while the area or middle part of each is possessed by a very large bed of the most exalted blue that can possibly be conceived, and which terminates in a radiated manner round the edges. This insect also affords an example of the caudated papilios, in which the lower wings are furnished with a pair of appendages resembling tails. It is an Asiatic insect. The ground-colour in some specimens is rather brown than black. The under surface is black, tinged with

with rufous near the tips, and the edges of the lower pair are ornamented by a series of large ocellated spots, of a reddish colour tinged with blue, and edged with black and white.

PSITTACUS EXIMIUS.



CHARACTER GENERICUS.

Rostrum aduncum : mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosâ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus varius, capite gula pectore crissoque coccineis, dorso nigro flavo-viridi undulato, alis caudaque cæruleis.

Rostrum pallidum. Pedes nigricantes. Rectrices duæ intermediæ virides.

A Nova Hollandia nuperrime illata est hæc avis, et jam primo depingitur. De splendido ejus ornatu speciatim differere supervacaneum foret, cum figura varios colores exquisite ostendit. Magnitudine et forma generali psittaco superbo seu Pennantii simillima est.





THE NONPARÉIL PARROT.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils roundish, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two forward and two backward.

SPECIFIC CHARACTER.

LONG-TAILED VARIEGATED PARROT,
with head throat breast and vent crimson,
back black undulated with yellow-green,
blue wings and tail.

The two middle tail-feathers are green

This bird is a species hitherto undescribed; having been very lately brought from New Holland. To particularize the richness of its robe would be unnecessary; the figure accurately shewing all its variegations of colour. In size and general form it is strongly allied to the Pennantian Parrot.

COLUBER NASICORNIS.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales,

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS.

COLUBER subolivaceo-ferrugineus, nigro irroratus, maculis dorsalibus pallidis nigro circumscriptis, fascia laterali undulata pallida.

Abdomen pallide ochraceum fuliginoso-maculatum.

Scuta abdom: 127.

Squam: subcaud: circiter 32.

Inter species hucusque ignotas numerandus est Coluber nasicornis. E numero est dirorum istorum serpentum quorum morsus in calidioribus mundi partibus, mortem inferre solet celerem et luctuosam. Si totum fere genus serpentinum horrescunt plurimi homines in hujusmodi investigationibus minus versati, quanto majori metu putemus illos percuti, qui in vivum hunc colubrum inopinato inciderint; quem totum horrificum deformat vultus præter modum torvus et atrox. Cornua enim gerit duo magna et acuminata, (non, qualia Ceraſtis,) supra oculos; sed super nasum seu summum maxillæ

maxillæ superioris sita. Erecta propemodum sunt, paulum tamen retro flectuntur, extrinsecusque ab utroque latere. Non omnino cornea sunt, sed quodammodo flexibilia, forma fere triangulari sive triquetra. Longa sunt circiter dimidium uncia, et a basi utraque exstat squama dura ejusdem fere formæ cum ipsis cornubus; quo fit, ut duo quasi minora cornua exurgere videantur. Os illi, ut aliis venenatis serpentibus, telis tubulatis duobus utrinque munitur, quæ, cum maxima sint, vulnus sævissimum possunt infligere. Horum minora sunt postica. Longus est Coluber nasicornis uncias circiter triginta quinque. Coloris est fusco-flavescentis, maculis parvulis nigricantibus creberrime irrorati. Per totam dorsî longitudinem, magnis intervallis, decurrit series macularum fusco-flavescentium, majoribus nigris immerfarum; protenditurque per utraque latera a capite ad caudam fascia angusta, ochracea, acute flexuosa, cujus pars inferior seu ventri proxima, nigrior multo est quam reliquum corpus. Venter obscure ochraceus est, seu cinereo-flavus, labeculis variis nigricantibus notatus; sparguntur insuper per totum corpus huc, illuc, maculæ plurimæ diversæ magnitudinis. Cauda tenuis brevisque pro corpore. Squamæ asperæ duræque et insigniter carinatae. Caput squamis parvis tegitur, parsi-que superior maculam habet permagnam fuscam, utrinque in processus acuminatos excurrentem. Latera capitis plumbeo, seu cinereo colore cinguntur. Caput ipsum latum et depressum, genæque fusco et flavicante variæ.

Captum fuisse putem hunc serpentem cum jam exuvias depositurus esset; squamæ quippe exteriores a subja-

subjacentibus facile separantur, quæ, hoc facto, lucidiores videntur; immo circa ventrem fere albescunt, maculis nigrioribus notatæ. Colubrum nasicornem accepit Dominus EDVARDUS JENKINS in oppido vulgo dicto *Charles-Town* in Carolina Australi degens, a navarcha e Guinea profecto, illoque nuperrime Museum Britannicum ditavit. Notum esse eum creditur in interiori Africa.



London Published by J. B. Waller & Co. Brown Street.

THE HORN-NOSED SNAKE.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.

Broad alternate *Scales* under the tail.

SPECIFIC CHARACTER.

OLIVE-BROWN SNAKE, freckled with blackish, with a row of pale dorsal spots surrounded by black, and a flexuous pale fascia on the sides.

The abdominal plates are 127. The subcaudal scales about 32.

The belly is of a pale olive-colour with dusky spots.

The snake here represented must be considered as a species hitherto unknown, and adds to the number of those malignant reptiles whose bite, in the hotter regions of the globe, proves the dreadful forerunner of a speedy and painful death. If at first glance of most of the serpent-tribe an involuntary sort of horror and alarm is so often felt by those who are unused to the examination of these animals, how much greater dread must the unexpected view of the species here exhibited be supposed to inflict? when to the general form of the creature

ture is superadded the peculiar fierceness and forbidding torvity with which nature has marked its countenance; distinguished by the very uncommon appearance of two large and sharp-pointed horns, situated, (not as in the *Ceraistes*, above the eyes,) but on the top of the nose, or anterior part of the upper jaw. They stand nearly upright, but incline slightly backwards and a little outwards on each side, and are of a substance not absolutely horny, but in some degree flexible. Their shape is somewhat triangular or three-sided. They are about half an inch in length, and at the fore-part of the base of each stands an upright strong scale, of nearly the same shape with the horn itself, and thus giving the appearance of a much smaller pair of horns. The mouth is furnished with extremely large and long fangs or tubular teeth, situated as in other poisonous serpents, and capable of inflicting the most severe wounds: two of these fangs appear on each side of the mouth, of which the hinder pair are smaller than the others. The length of this animal is about thirty-five inches. Its colour is a yellowish olive-brown, very thickly sprinkled all over with minute blackish specks. Along the whole length of the back is placed, at considerable distances, a series of yellowish-brown spots or marks, each of which is imbedded in a patch of black; and on each side the body, from head to tail, runs an acutely flexuous or zig-zag line or narrow band, of an ochre-colour. This band is bounded beneath by a much deeper or blacker shade than on the rest of the body. The belly is of a dull ochre-colour or cinereous yellow, freckled with spots and
markings

markings of blackish. Besides these there is a number of black spots of different sizes here and there dispersed over the whole snake. The tail is somewhat thin and short in proportion to the body. The scales of this snake are harsh and stiff, and are very strongly carinated. The head is covered with small scales, and is on its upper part marked by a very large longitudinal patch of brown, running out into pointed processes at the sides, and bounded by a space of dull lead-colour or cinereous. The shape of the head is broad and flattened: the cheeks are varied with blackish and yellow. It seems to have been taken at a period not far distant from that of casting its skin; as the exterior scales separate easily from the subjacent ones, which then appear of a clearer and lighter colour than before, and the yellowish variegations on the sides and belly approach to a whitish colour, with darkish spots and marks. This snake is supposed to be a native of the interior parts of Africa, and was obtained from the master of a Guinea vessel by the Rev. EDWARD JENKINS of Charles-Town, South Carolina, by whom it was lately presented to the British Museum.



MANTIS STRUMARIA.



CHARACTER GENERICUS.

Caput nutans, maxillosum, palpis instructum.

Antennæ (plerisque) setaceæ.

Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.

Pedes antici compressi, subtus ferrato-denticulati, armati ungue solitario et digito setaceo laterali articulado. *Postici* quatuor, læves, gresforii.

Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

CHARACTER SPECIFICUS, &c.

MANTIS thorace utrinque membranaceo-dilatato obcordato.

Lin. Syst. Nat. p. 691.

Roes. inf. 2. gryll. t. 3.

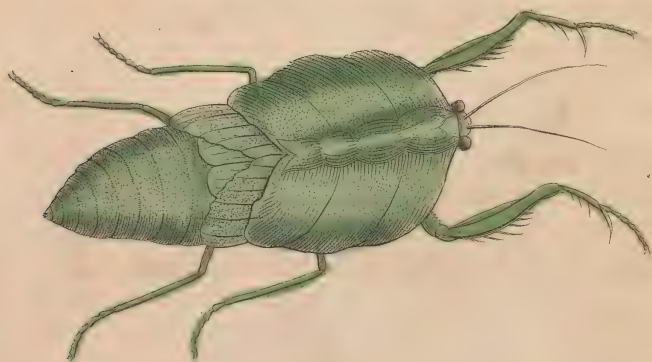
Mer. Sur. 27. t. 27.

Cum anteaetis temporibus, fabulis et erroribus immerfa jaceret veritas, non defuere qui hujusmodi insecta folia esse quasi animata firmiter crediderint. Notabilis admodum est thorax permagnus et dilatatus. Alæ inferiores

feriores pellucidæ sunt, levissimo tantum virore tinctæ.
Americam Australem incolit singulare hoc animal-
culum.

Fig. 1, Pupa, seu insectum adhuc imperfectum.

Fig. 2, Imago, seu insectum declaratum.



THE
BROAD-BREADED MANTIS.



GENERIC CHARACTER.

Head unsteady: Mouth armed with jaws, and furnished with palpi.

Antennæ setaceous, (some few species excepted.)

Wings four, membranaceous, in most species convoluted: the lower ones (generally) plicated.

Feet anterior compressed, ferrated beneath, armed with a lateral solitary claw and jointed processes; *posterior* four, smooth, formed for walking.

Thorax (in most species) elongated and narrowed.

SPECIFIC CHARACTER, &c.

MANTIS with the sides of the thorax nearly membranaceous and greatly dilated.

Mer. Sur. t. 27.

Roef. 2. *gryll.* t. 3.

The Mantis *Strumaria* is amongst the number of those insects which in less enlightened times have been considered as a kind of animated leaves. The very large, dilated thorax in this insect is highly remarkable.

The

The lower wings are of a transparent appearance, and have but a slight cast of green. This curious animal is a native of South America.

Fig. 1, The insect in its pupa state.

Fig. 2, The insect in its complete state.

PSITTACUS PULCHELLUS.



CHARACTER GENERICUS.

Rostrum aduncum : mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus viridis, subtus luteus,
capistro alisque cæruleis.

Rostrum pedesque nigricant.

Inter minimas sui generis numeranda est hæc species, non longe enim superat magnitudine figuram quæ in tabula continetur. Notabile est hanc avem, parvula licet sit, magno illi psittaco qui Ararauna dicitur, primo intuitu admodum similem esse. Species procul dubio nunquam adhuc descripta est, et novam Hollandiam incolit.

London, Published by W. & A. G. & Co. 1799. By J. S. & Co. 1800. No. 10. 1801. 1802.



THE TURCOSINE PARRAKEET.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils roundish, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two backward and two forward.

SPECIFIC CHARACTER.

LONG-TAILED GREEN PARRAKEET, yellow beneath, with blue wings and frontlet.

The beak and legs are black.

This may be numbered amongst the smallest of its tribe, not very much exceeding in size the figure here represented. It is remarkable that this diminutive species bears at first view a considerable resemblance to the *Pittacus Ararauna*, or great blue and yellow Macaw. It is an undoubted non-descript, and is a native of New Holland.

SILURUS CALLICHTHYS.



CHARACTER GENERICUS.

Caput nudum. Os cirris aliquot filiformibus tentaculatum.

Membr. branch. radiis 4—14.

Corpus: Radius pinnarum pectoralium aut dorsalis primus spinosus, retrodentatus.

Lin. Syst. Nat. p. 501.

CHARACTER SPECIFICUS, &c.

SILURUS pinna dorsali postica uniradiata, squamis ordine duplici, cirris quatuor.

Lin. Syst. Nat. p. 506.

Amæn. acad. 1. p. 317. t. 14. f. 1.

Gron. mus. 1. n. 70.

Seb. mus. 3. t. 29. f. 13.

Squamarum quibus pisces muniuntur, pulchritudo et diversitas, observationum microscopicarum studiosis amplissimam diu præbuerunt materiem. Nonnullis sunt squamæ ovatæ, annulis concentricis fibrarum reticularum ornatae: aliis fere quadratæ, fibris in divisiones inæquales dispositis, marginibus aculeorum pellucidorum serie distinctis. Quarundam specierum squamæ ob
exigui-

exiguitatem primo visu vix discerni possunt; aliarum non modo minimas sed et multo densa coopertas attentissima oculorum acie investigare necesse est. Sunt e contrario pisces qui squamis teguntur amplissimis; quod insigniter evenit in peculiari illa varietate, (ni potius distinctam speciem putemus) Cyprini, nomine Cyprini *Regis* distincti; cujus squamæ quadrantem diametri ipsius corporis æquant. Non desunt denique exempla piscium ad diversissima genera pertinentium, quorum squamæ amplissimæ et durissimæ a reliquis in tantum discrepant, ut prima facie ad ipsa animalia crustata videantur accedere. Hos vocat Linnæus *cataphractos*, quod scilicet quasi lorica muniantur. Ejusmodi principes sunt *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphractus*, *Loricaria cataphractus*. *Silurus Callichthys*, quem ostendit tabula, tum Europam tum Americam inhabitat; plerumque autem in America Australi, et præcipue in Brasilia invenitur. Rivulos incolit, e quibus, si æstate fervidiore fere exsiccati fuerint, mirum dictu! se surripit, et per prata late evagatur, aquas altiores quæritans. E piscinis quoque in quibus servatus sit interdum erepit, margines seu aggeres perforando. Relictis tamen aquis, super terram incedere non solius est *Callichthys*; idem enim facere solent alii nonnulli; *Muræna* præcipue *Anguilla* dicta, quæ per prata noctu prorepat, limaces fortasse aliaque id generis prædatura; et si hyems fuerit severior, sub ipso etiam foeno et in cavernis latitans interdum deprensa est. *Callichthys* longitudo communis est circiter quatuor pollices: color fusco-flavescens, dorso paulum obscuriore. Oculi minuti; et utrinque ad latera oris (ut in aliis ejusdem generis) tentacula duo longa et magna extenduntur.



London, published March 1794 by J. D. B. & Co. 125 Strand, London

THE
WANDERING SILURUS.



GENERIC CHARACTER.

Head naked, large, depressed.

Mouth wide, generally furnished with long tentacula or beards.

First ray of the pectoral and dorsal fins commonly strong and serrated backwards.

SPECIFIC CHARACTER, &c.

SILURUS with a double range of scales, four beards, and the last dorsal fin single-rayed.

Gron. mus. 3. t. 29. fig. 13.

Marcgr. bras. 151.

The beautiful and varied structure which distinguishes the scales of fishes, has long afforded an extensive field for microscopical observation. In some the scales are of an oval shape, with concentric rings of reticulated fibres; in others of a squarish form, with the fibres curiously disposed into dissimilar patches or subdivisions, and ornamented at the extremities with a series of transparent aculei or prickles. In some fishes the scales are so extremely small as to be scarce distinguishable on a cursory view, and in some they are not only very small, but

but so coated over by a mucous tegument as to require the most attentive investigation in order to discover them. In others, on the contrary, they are as remarkable for their extreme largeness, as in the peculiar variety (if not distinct species) of *Cyprinus* or Carp, known by the title of the King-Carp, in which the scales are equal to a fourth part of the diameter of the fish. Lastly, there are not wanting some instances of fish belonging to very different genera, which are coated with scales of a size so very large, of a structure so uncommonly strong, and of a disposition so unlike that which appears in the scales of other fish, that they seem at first glance to belong to the crustaceous tribe. Fishes of this peculiar cast are termed by Linnæus *cataphracted* or mailed fish, as if in suits of armour. Of these the most remarkable are the *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphractus*, and *Loricaria cataphractus*. The *Silurus Callichthys*, here represented, is a native both of Europe and America, but is more common in South America than in Europe, being principally found in Brasil. It inhabits rivulets, and when these during a dry season grow extremely shallow, it has the extraordinary faculty of creeping out and traversing over the dry ground in order to seek deeper water. It has also been known to make its escape from fishponds in which it has been confined, by piercing through the banks. This terrestrial locomotion of fishes is not however confined to the *Callichthys*, but is known to take place in some others, and particularly in the common eel, which frequently creeps about meadows by night, in quest perhaps of slugs, &c., and has been known during the frosts of a severe winter to take refuge under hay-ricks and

and in caverns. The general length of the Callichthys, is about four inches: its color is a yellowish brown, somewhat deeper on the back than on the other parts. The eyes are small, and on each side the mouth are situated (as in several others of this genus) two very large and long cirrhi or beards.

TUBIPORA MUSICA.



CHARACTER GENERICUS.

Animal Nereis ?

Corallium tubis cylindricis, cavis, erectis, parallelis.

Lin. Syst. Nat. p. 1270.

CHARACTER SPECIFICUS, &c.

TUBIPORA tubis fasciculatis combinatis: diffipimentis transversis membranaceis distantibus.

Lin. Syst. Nat. p. 1270.

PSEUDO-CORALLIUM RUBRUM.

Aldr. mus. 291.

ALCYONIUM FISTULOSUM RUBRUM.

Baub. hist. 3. p. 808. fig. 2.

TUBULARIA PURPUREA.

Tourn. inst. t. 342.

Iis lithophytis annumerandum est hoc corallium quorum si formam generalem spectes, vix possit dubitari quin ab animalibus efficta sint. Constat quippe tota massa e tubulis erectis et parallelis, alio super alium gradatim affurgente, qualiter fere fit in cellulis apum. Septa transversa quibus tuborum strata connectuntur, ascendunt inæqualiter in variis partibus, tubis ipsis raro unciam,

unciam, interdum semiunciam altis, eorundem diametro nunc decimam nunc octavam pollicis partem attingente. Ab hac tamen proportionē in diversis speciminibus longe deceditur. Vera animalium incolentium natura vix adhuc pro certo explorata est: ea tamen putat Linnæus Nereidibus vix ac ne vix differre. Speciem hac pulchriorem vix fortasse inveniēmus in toto genere corallino: structuræ enim ipsius elegantiam mire auget color suaviter purpureus seu phoeniceus. Si singuli tubi accuratius inspiciantur, patebit eorum unumquemque tubulum minorem geniculis aliquot seu septis radiatis divisum continere, cujus ope diversis stratis sæpe cum se invicem communicatur. In magnam molem sese extendit formosum hoc corallium, nec defuere specimina quæ pedes duos immo tres diametro superarunt. Cum adhuc sit recens, tota superficies exterior gelata seu mucosa substantia obducitur, quæ etiam per partes tubulatas quodammodo diffundi videtur. Magna Tubiporæ mu-
ficæ est copia circa littora insularum Indicarum nec non maris Pacifici.

Fig. 1, Pars aperta, et microscopio aucta, ut structura interior pateat.

Fig. 2, 3, 4, Tubuli separati magnitudine naturali.



S. N.

London, Published March 1st 1799; by F. & J. Nodder & Co. No. 15 Brewer Street.

CRIMSON TUBIPORE, OR ORGAN CORAL.



GENERIC CHARACTER.

Animal allied (probably) to the genus *Nereis*.

Coral consisting of erect cylindric parallel tubes.

SPECIFIC CHARACTER, &c.

TUBIPORE with fasciculated connected tubes,
and distant transverse membranaceous dissepiments.

Argenv. conch. t. 26. fig. A.

Ellis Zooph. p. 144. t. 27.

This is one of those Lithophytes which in structure and general appearance seem plainly to indicate the operation of animals, the whole mass consisting of an assortment of upright parallel tubes, rising over each other by stages, somewhat in the manner of the cells of an honeycomb. The stages or transverse dissepiments by which the strata of tubes are connected, are of unequal heights in different parts of the mass, and the tubes of each stratum seldom rise to the height of an inch, and sometimes do not exceed half an inch, and their diameter is from about a tenth to an eighth of an

an inch. In different specimens however there is a considerable variation, both in the proportional length and diameter of the tubes. The real nature of the inhabiting animals of these tubes is not clearly ascertained, but they are supposed by Linnæus to be strongly allied to Nereides. In point of beauty scarce any of the coral tribe can exceed the present species; the colour, which is a rich purple or deep crimson, highly increasing the elegance of the fabric. The individual tubes, when accurately examined, appear each furnished with a smaller internal tube, which is divided at certain distances by radiated diaphragms or partitions. By means of these internal tubes the different strata often communicate with each other. This curious coral extends itself to a very considerable size; specimens having been frequently seen of from one to three feet in diameter. In its recent state the whole upper surface is coated over by a mucous or gelatinous substance, which seems to pervade the tubular texture of the whole coral. The *tubipora musica* is produced in the greatest abundance about the shores of the East-Indian islands and those of the Pacific Ocean.

Fig. 1, A piece laid open and magnified by the microscope, in order to shew the interior structure.

Fig. 2, 3, 4, Separate tubes of their natural size.

CASUARIUS AUSTRALIS.



CHARACTER GENERICUS.

Rostrum depressum, rectum, subconicum.

Nares ovatae.

Alae brevissimae, volatui inutiles.

Femora in parte inferiore denudata.

Pedes tridactyli, digitis omnibus anticis.

Cauda nulla.

Lath. ind. orn. p. 664.

CHARACTER SPECIFICUS, &c.

CASUARIUS FUSCUS, vertice inermi.

STRUTHIO CASUARIUS.

Lin. Syst. Nat. p. 265.

CASUARIUS NOVÆ HOLLANDIÆ.

Lath. ind. orn. p. 665.

Inter aves quas protulit ingens illa insula Nova Hollandia (ni continens potius appelletur) insignis est quæ in tabula depingitur Casuarii species; a communi seu Africana adeo discrepans, ut dubitari non possit illam penitus et revera diversam esse. Magnitudine enim est multo majori, alta interdum, ad minus, pedes septem. Color imus cinereo-fuscus, subtus pallidior. Caret caput galea seu crista illa cornea, quæ speciem commu-

nem distinguit. Collum præterea loco rugosæ illius et rubræ cæruleæque cutis, et caruncularum quæ in Africana conspicuæ, pennis parvis vestitur, per quas ipsa cutis in hac parte leviter cærulea vix ac ne vix discerni possit. In apicibus alarum, quæ ad volandum inutiles, unguiculus est incurvatus et acutus. Crura validissima, nigricantia, et in parte postica conspicue ferrata. Rostrum ejusdem fere coloris cum cruribus.



THE SOUTHERN CASSOWARY.



GENERIC CHARACTER.

Bill depressed, strait, nearly conical.

Wings extremely small, and unfit for flight.

Feet tridactylous, with all the toes standing forward.

SPECIFIC CHARACTER, &c.

DARK-BROWN CASSOWARY with unarmed head.

NEW-HOLLAND CASSOWARY.

White's Voyage, pl. 1. p. 129.

One of the most remarkable birds which the continent of New Holland has yet afforded is a species of Cassowary which differs from the common or African kind in so many respects as to leave no doubt of its being perfectly distinct. In size it is considerably superior to the common Cassowary, having been seen of the height of at least seven feet. Its general colour is a sort of cinereous brown, somewhat paler beneath. The head is destitute of that horny crest which so strikingly distinguishes the African species; and the neck instead of being furnished with a wrinkled longitudinal red-and-blue skin and wattles as in that bird, is covered

with small feathers, through which the skin, which is of a bluish colour in that part, is just visible. The wings are perfectly useless for flight, and at the tip of each is a small, sharp, crooked spur or claw. The legs are very strong, of a blackish colour, and of a serrated appearance on the hinder part. The beak is of nearly the same colour with the legs.

ARGONAUTA ARGO.



CHARACTER GENERICUS.

Animal Sepia.

Testa univalvis, spiralis, involuta, membranacea, unilocularis.

Lin. Syst. Nat. p. 1161.

CHARACTER SPECIFICUS, &c.

ARGONAUTA carina utrinque subdentata.

Gmel. Syst. Nat. p. 3367.

NAUTILUS fulcatus.

Klein. ostr. t. 1. f. 3.

NAUTILUS tenuis.

Rumpf. mus. t. 18. f. 1. 4. A. B.

Utcunque inter animalia ejusdem familiæ eadem fere fit formæ partiumque similitudo, pauca tamen proferri possunt exempla, in quibus a norma sua insigniter aberrare solet natura; præcipue vero in classe testacea. Testarum enim univalvium (ut dicuntur) incolæ, generi Limacis simillimi sunt; bivalvium contra generibus Tethyos et Ascidiaë. Formæ hujus anomalæ nullum notabilius argumentum possit feligi quam in genere Argonautæ; vel Nautili qui papyraceus dicitur: ab omnibus enim aliis ejusdem divisionis adeo discrepat animal

animal hanc testam inhabitans, ut illius verum esse et genuinum incolam non mirum sit si ægre credatur. Linnæus igitur de hac re scribit, “ Domunculam alienam, quemadmodum Cancer Diogenes seu Bernhardus, intraſſe Sepiam, cum non connexa sit testæ, sibi adeo alienæ, qui non crederet, nisi tot testes nobis obſtringerent, qui propriis oculis viderunt Argonautam velificantem?”

Extra testam viſus Argonautæ habitator ſepiæ ſpeciem, ſepiam præcipue octopodiam admodum refert: nec ſane ab ea forma generali differt, niſi quod ad extremitates brachiorum duorum membranas ovatas habeat, quas cum ſuper mare pacatum navigat, erigit, reliquis ſex brachiis remigans. Fieri non potuit ut miranda res hominum oculos effugeret: ideoque a variis auctoribus deſcriptam legimus; nullis elegantius quam Plinio.

“ Inter præcipua autem miracula eſt, qui vocatur Nautilus, ab aliis Pompilos. Supinus in ſumma æquorum pervenit, ita ſe paulatim ſubrigens, ut emiſſa omni per fiſtulam aqua, velut exoneratus ſentina, facile naviget. Poſtea prima duo brachia retorquens, membranam inter illa miræ tenuitatis extendit; qua velificante in aura, cæteris ſubremigans brachiis, media cauda, ut gubernaculo, ſe regit. Ita vadit alto, Liburnicarum ludens imagine, et ſi quid pavoris interveniat, hauſta ſe mergens aqua.”

Cavendum eſt hanc testam, quæ verus eſt Argonauta, cum Nautilo communiter dicto, ſeu Nautilo *concamerato* confundamus, qui generis eſt omnino diſtincti. Creſcit Argonauta Argo ab una uncia ad ſex vel etiam octo. Mare Mediterraneum nec non Indicum incolit.



THE
ARGONAUT,
OR
PAPER NAUTILUS.



GENERIC CHARACTER.

Animal extremely resembling a Sepia.

Shell univalve, spiral, extremely thin.

SPECIFIC CHARACTER, &c.

ARGONAUT with whitish furrowed shell, with
the keel dentated on each side.

THE PAPER NAUTILUS.

NAUTILLE PAPIRACÉ.

Argenv. t. 5.

Notwithstanding the general similarity of structure which prevails amongst animals of the same tribe, there are yet some remarkable deviations from it. This is nowhere more conspicuous than in the testaceous tribe, in which the inhabitants of most of the Univalves bear a strong affinity to the genus *Limax*, or Slug, while those of almost all the Bivalves are distinguished by a striking similarity to the genera of *Tethys* and *Ascidia*. Amongst the instances of deviation from the general plan may
be

be adduced the very remarkable and curious genus Argonauta or Paper-Nautilus, which is inhabited by an animal of an appearance so widely removed from those of most of the Univalves, as almost to make doubtful the reality of its being the genuine and proper inhabitant of the shell in which it resides. Linnæus accordingly has well observed, that unless the evidence of so many eye-witnesses had enforced belief, it might have been reasonably imagined that an animal so unlike the rest of the tribe, was only a usurper of the shell; in the same manner as the Cancer Diogenes and a few others, which take possession of such vacant shells as happen to suit their convenience. The inhabitant of the Argonauta, if seen detached from its shell, might pass for a real Sepia, and bears so great a resemblance to the Sepia octopodia or eight-armed Cuttle-fish, that the principal difference consists in its being furnished at the extremities of two of its arms with a pair of membranes of an oval form, which, during its occasional navigations on the surface of a calm sea, it raises upright and expands to the gale; while by the assistance of the six remaining arms it rows itself along. It seems impossible that so curious a spectacle could have escaped the particular observation of mankind. Accordingly we find it described by various authors: by none however more elegantly than by Pliny, whose short and beautiful description, has generally been quoted by modern writers.

“ But amongst the principal miracles of nature is the animal called Nautilus or Pompilos. It ascends to the surface of the sea in a supine posture, and gradually raising itself up, forces out by means of its tube all the
water

water from the shell, in order that it may swim the more readily; then throwing back the two foremost arms, it displays between them a membrane of wonderful tenuity, which acts as a sail, while with the remaining arms it rows itself along; the tail in the middle acting as a helm to direct its course; and thus pursues its voyage like a little ship; and if alarmed by any appearance of danger, takes in the water and descends."

We must be careful not to confound this shell, which is the real and proper Nautilus, with the chambered or pearly Nautilus, which belongs to a very distinct genus. The Argonauta Argo is found of various sizes, from one to six or eight inches in length, or even larger. It is a native both of the Mediterranean and Indian seas.

SCORPIO AFER.



CHARACTER GENERICUS.

Pedes octo : infuper *Chelæ* duæ frontales.

Oculi octo : horum tres ad latus utrumque thoracis ; duo in tergo.

Palpi duo, cheliformes.

Cauda elongata, articulata, terminata Mucrone arcuato.

Pectines duo subtus, inter pectus et abdomen.

Lin. Syst. Nat. p. 1037.

CHARACTER SPECIFICUS, &c.

SCORPIO pectinibus 13-dentatis, manibus subcordatis pilosis.

Lin. Syst. Nat. p. 1038.

SCORPIO INDUS.

Degeer. inf. 7. p. 341. n. 3.

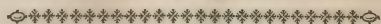
Inter omnia insecta hætenus cognita, quæ venenosæ et malignæ sunt indolis, Scorpiones primo semper numerari soliti sunt. Notandum tamen est vim veneni vel augeri vel minui pro diversa hominum vulneratorum idiosyncrasia, statuque ipsius animalis, majorive minorive impetu quo plaga infligitur. Concedendum etiam est vulgarem Scorpionem Europæum, multo magis

gis quam necesse est timeri, cujus ab aculeo vix aliquid mali potest evenire. At vero ingentes Africani Scorpiones, qualis est ille qui in tabula depingitur, vulnus infligere posse jure censetur, quod dolor acerrimus, virisque gravissimum solent comitari. Venenum per tria minutissima foramina prope apicem aculei exit, a summo ferè apice et ab utroque latere. Notum est multum diuque dubitasse physicos sitne foramen necne, per quod venenum effunditur, in araneorum forcipibus. Similiter de foraminibus in scorpionis aculeo dubitatum est, immo pene ad lites perventum. Celeberrimus Redi, optimis licet vitris microscopicis tunc temporis instructus, non potuit foramen discernere; qui tamen revera illud extare minime dubitavit, quippe qui ab aculeo compresso guttulam quasi liquoris albescentis juxta apicem exprimi sæpe viderat. Alii autem multi ullum esse foramen plane negarunt. Vallisneri et Leewenhoek foramina duo triangula clare visa descripserunt ab utroque latere prope apicem sita; alii tria detexerunt; unde patet Scorpionis aculeum venenum promptius efflare posse quam alius cujusvis animalis. Pars illa quæ Scorpionibus sub pectore sita est, quæque more pectinis denticulata est, hoc ipso nomine *pectinis* a Linnæo designatur; qui etiam diversas species numero dentium in pectine distinguere conatus est. Fefellit tamen multos hæc discriminandi methodus; pectinibus enim ejusdem speciei impar forsan sit numerus dentium; ideoque hoc solo signo species non possunt satis accurate dignosci. Species hic depicta est magnus Scorpio Africanus, a Linnæo Scorpio Afer nominatus. Color ejus communis est admodum fuscus, interdum pene nigricans. In magnam crescit molem, interdum multo majorem quam repræ-

repræsentat tabula. Vivipari sunt Scorpiones, et plurimos uno partu edunt pullos, qui perfecte formati, nullam aliam mutationem subeunt, nisi forte quod araneorum more exuvias abjiciant. Quæ scripserunt varia et mira de his animalibus antiquiores phyci, aniles sunt fabulæ, quas præfens ævum, cui omnigena affulfit scientia, ægre et indigne audiat. Hæc igitur putida et inania lubens taceo. Unum tamen e plurimis fas mihi fit feligere; Scorpionem nempe carbonibus ignitis circumdatum, cum nullum sibi exitum patere viderit, saluti tandem desperantem, sui ipsius aculei ictibus perire. Hanc fabulam, quasi fide dignam, plures etiam nunc temporis, serio et graviter recitant, et pro unico suicidii exemplo inter inferiora animalia feligunt.

Fig. 2. Pectines.

THE
AFRICAN SCORPION.



GENERIC CHARACTER.

Eight *Legs*, besides the 2 frontal *Chelæ*.

Eight *Eyes*, viz. 3 on each side the thorax, and 2 on the back.

Two cheliform *Palpi* or feelers.

Tail long, jointed, terminated by a crooked *point*.

Two *Combs* beneath, between the thorax and abdomen.

SPECIFIC CHARACTER, &c.

SCORPION with 13-toothed combs and somewhat heart-shaped hairy claws.

Swammerd. bibl. nat. t. 3. f. 3.

Roef. inf. 3. t. 65.

Scorpions may be considered as the most malignant and poisonous of all known insects. It is true that the effect of their sting will differ greatly according to the different circumstances of the constitution of the person receiving the wound, as well as of the state of the animal itself, and the degree of violence with which the wound was inflicted. It is also to be acknowledged that the common European Scorpion is not in general
of



Centruroides opacatus (L.) (L. B. Smith & Powell)

of so terrible a nature as is commonly supposed, and it is but rarely that any bad consequences happen from its sting. But the large Scorpions of Africa, such as here represented, may well be supposed capable of inflicting a wound of the most severe pungency and of the most dreadful malignity. The poison is evacuated through three very small foramina near the tip of the sting, viz. one on each side the tip, and the other in the upper part. It is well known that a diversity of opinion has subsisted amongst authors relative to the slit or foramen in the fangs of spiders, through which their poison is evacuated. The same contrariety of sentiment takes place with respect to such a foramen in the Scorpion's sting. The celebrated Redi, assisted by the best microscopes he could procure, was not able to discover it; though he was well convinced of its existence from perceiving the minute drop of poison exude from near the tip of the sting. Others have denied the existence of the foramen; but Vallisneri and Leewenhoeek have both described two foramina, viz. one on each side the tip, and which are of a shape inclining to triangular: besides these a third foramen has sometimes been seen; so that the sting of the Scorpion can with greater facility discharge its venom than that of any other animal. The part in Scorpions which is seated below the breast and is toothed in the manner of a comb, is in the Linnean language termed the pecten; and Linnæus has endeavoured to distinguish the species of Scorpions from the number of teeth in this part; but this has been found a fallacious mark of distinction; since they vary in the number of teeth, and consequently no great certainty can be obtained from this character alone.

The

The very large species here represented is the great African Scorpion, or *Scorpio Afer* of Linnæus. Its general colour is a deep brown, nearly approaching in some specimens to black. It grows to a very large size; specimens being sometimes seen which far exceed in size the figure here represented. Scorpions are viviparous insects, and produce a very considerable number of young at once; which are completely shaped, and undergo no farther change, except (perhaps) casting their skin from time to time in the manner of spiders. Several fabulous anecdotes of these animals have been recorded by the older writers on natural history, which are totally unworthy of being related in the present enlightened age. One of the most remarkable of these legends is, that a Scorpion surrounded by live coals, finding no method to escape, grows desperate from its situation and stings itself to death. It is not uncommon to hear this quoted with serious credulity as the only instance of suicide amongst inferior animals.

Fig. 2. The pectinated parts or combs.

CERTHIA CARDINALIS.



CHARACTER GENERICUS.

Rostrum arcuatum, tenue, subtrigonum, acutum.

Lingua acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 184.

CHARACTER SPECIFICUS, &c.

CERTHIA RUBERRIMA, alis caudaque nigris,
abdomine albido.

CERTHIA CARDINALIS ?

Lath. ind. orn. p. 290.

CERTHIA RUBRA ?

Gmel. Syst. Nat. 1. p. 479.

Inter minimas numeratur hæc avicula fui generis, sistitque eam tabula magnitudine naturali. Forma generali Certhiæ cruentatæ Linnæi videtur simillima. In insulis aliquibus Australibus nasci creditur; quicquid autem ad peculiare illius mores attinet incognitum omne et incertum est.

THE
CARDINAL CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp-pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnaeus. Latham. Pennant.

SPECIFIC CHARACTER, &c.

CARMINE-RED CREEPER, with black wings and tail, and whitish belly.

CARDINAL CREEPER.

Lath. Syn. 1 p. 733.

This bird may be numbered amongst the smallest of its genus, the figure representing it of its natural size. In its general appearance it seems extremely nearly allied to the *certhia cruentata* of Linnaeus, or red-spotted creeper. It is supposed to be a native of some of the Southern islands, but its particular history seems to be unknown.



PLATE

London, Published, May 15th 1798 by T. R. Nodding, & G. M. Brewer, Senec.

ASTERIAS CAPUT MEDUSÆ.



CHARACTER GENERICUS.

Corpus depressum: crusta subcoriacea, tentaculis muricata.

Os centrale, quinquevalve.

Lin. Syst. Nat. p. 1098.

CHARACTER SPECIFICUS, &c.

ASTERIAS radiis dichotomis, ore depresso.

ASTERIAS CAPUT MEDUSÆ.

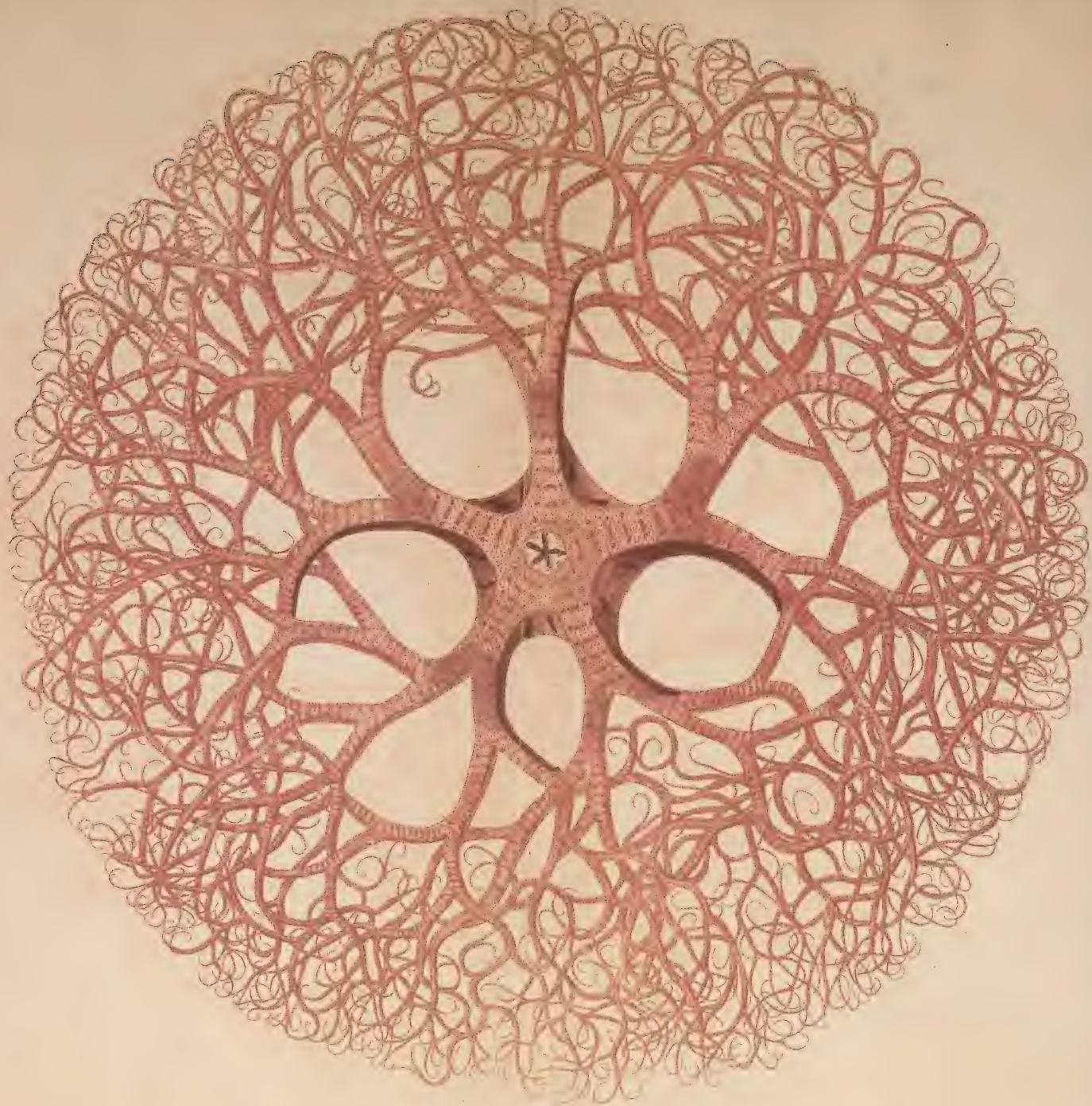
Lin. Syst. Nat. p. 1101.

STELLA MARINA.

Fonst. inf. t. 26. f. 11.

Asteriæ, seu stellæ æquoræ, ut vulgo nominantur, mirum et numerosum constituunt genus animalium marinarum. Specierum diversarum diversa admodum est facies externa. Pars maxima formæ sunt stellatæ, seu in quinque radios æquales divisæ: aliæ in plures radios, decem nempe vel tredecim: nonnullæ scabræ et tuberosæ, nonnullæ læves, aliæ denique spinosæ sunt. Species vero reliquis longe mirabilior Asterias caput Medusæ vocatur. Hæc a centro in quinque æquales et æque distantes radios geniculatos primum dividitur, quorum singuli dein in duos alios minores divaricant;

hi iterum paulo longiore intervallo in duos adhuc minores separantur; et hoc modo, divisionibus minoribus et numerosioribus, infinita pene serie sensim attenuata et multiplicata, distribuuntur membra, donec millia multa numero superent. Inde fit ut animal quasi rete fit vivum, nec immerito *rete mirabile* possit dici, cum illa quæ pro cibo natura voluit animalia, contractis subito innumeris ramulis amplectatur, et adempta aufugendi potestate, misera devoret. Asteriæ facultatem repellulandi habent, membrumque aliquod vel casu vel vi abruptum aut avulsum progressu temporis renovatur. In oceano, præsertim prope littora cibi captandi gratia vagantur, animaliaque non tantum nuda et molliora sed etiam testis oblecta comedunt; dentibus enim duris et acutis spinas referentibus armantur, adeo fitis ut aculei omnes ad centrum convergant, dispares in diversis speciebus. Species hic depicta in oceano fere omni invenitur, præcipue in mari Mediterraneo. Colore variat: interdum pallida, seu rufo-albescens, interdum fuscescens, immo etiam penitus fusca reperitur. Asteriæ (fortasse,) ut plurimum, viviparæ? sunt.



THE
BRANCHED ASTERIAS,
OR
MEDUSEAN STAR-FISH.



GENERIC CHARACTER.

Body depressed; covered with a coriaceous crust,
muriated with tentacula.

Mouth central, with five valves.

SPECIFIC CHARACTER, &c.

ASTERIAS, with regularly-divided and subdivi-
ded branches, and depressed mouth.

MEDUSA-HEAD STAR-FISH.

BASKET/STAR-FISH.

The Asteriæ or sea-stars, as they are generally called, form a very numerous and wonderful genus of marine animals. The several species differ greatly in appearance from each other: the greater number are of a stellated form, and are divided into five rays or processes; others are divided into a much greater number of rays, as ten, and thirteen. Some species are smooth, some tuberculated, others prickly. The species which of all others is most worthy of admiration is that called the Caput Medusæ, or Medusa's Head Star-fish: this
very

very curious animal is first divided into five equidistant, thickly-jointed processes, each of which is soon subdivided into two other smaller ones, and each of these, at a somewhat farther distance, into two others still smaller : this mode of regular subdivision is continued to a vast extent, and in the most beautiful gradation of minuteness, till at length the number of the extreme ramifications amounts to several thousands. By this most curious structure the animal becomes as it were a living net, and may well deserve the title of *rete mirabile*, and is capable of catching such creatures as are by nature destined for its prey, by the sudden contraction of all its innumerable ramifications, by which the unfortunate object is secured beyond all possibility of escape. The sea-stars have a very considerable degree of reproductive power, and if injured by accidental violence, or if one or more of their limbs or branches be torn or cut off, the creature will in time be furnished with new ones. They wander about the ocean, particularly near the shores, in quest of food, and prey not only on the softer animals, but even on the smaller shell-fish; and are armed for this purpose with hard and sharp teeth, resembling prickles, and situated in a circular form, with the points converging towards the opening of the mouth, and differing in number in the different species. The species here represented is not uncommon in most seas, and is frequently found in the Mediterranean. In colour it varies, being sometimes pale, or reddish white, and sometimes of a brown, more or less intense. The *Asteriæ* in general are viviparous ? animals.

PTINUS FATIDICUS.



CHARACTER GENERICUS.

Antennæ filiformes ; articulis ultimis majoribus.
Thorax subrotundus, immarginatus, caput excipiens.

Lin. Syst. Nat. p. 565.

CHARACTER SPECIFICUS, &c.

PTINUS fuscus subpilosus, griseo irregulariter maculosus.

DERMESTES TESSELATUS ? ?

Fabr. Syst. Ent. p. 56. *Sp. inf.* p. 65.

PTINUS PULSATOR ?

Gmel. Syst. Nat. p. 1605.

Ex ineptiis omnibus quæ imbecillos vulgi animos occuparunt, inanior nulla est quam mortifagi, ut dicitur, metus; qui parvulum licet insectum, ruris quietem perturbare, vanisque et falsis terroribus totum pagum solebat implere. Dominatur etiam nunc in populorum animis superstitiosa ista sollicitudo, nequique fugare has tenebras quod jam fere per totum orbem diffunditur scientiæ et veritatis lumen. Fatendum quidem est, illis qui in pane quotidiano comparando totum fere tempus

terere

terere coguntur, deesse tum otium tum mentem ut in causam peculiaris alicujus sonitus accurate philosophiceque inquirent: mirum tamen est insectum commune non penitus cognosci, nec melius intelligi unde sonitus exoriatur.

Vere jam provecto, 'mutuo se convocare solent formidata hæc animalcula, eodem fere modo quo aves; licet non sit vera vox, sed pulsatio capitis clypeati in duram aliquam substantiam. Audiuntur ictus septies, novies, vel undecies; quod ipsum fortasse majorem vulgo metum incutit. Repetuntur sonitus celeriter, incertis intervallis, et in domibus antiquis, ubi maxima est Mortisagorum copia, per totum fere diem possunt audiri; præsertim si calidior sit aeris temperies. Exacte imitari poteris hos ictus si unguem modice in mensam impingas. Cum colori ligni veteris simillimus sit color mortisagi, inquirentis oculus diu eluditur. Longus est circiter quadrantem unciae, modica crassitie. Ad coleoptera pertinet, quorum nempe alæ elytris seu tegumentis corneis munitæ sunt; licet enim rarissime volat, volatilis est. Referri debet proculdubio ad genus *Ptinus* dictum. Miror nec inveniri eum in editione duodecima systematis naturæ Linnæi, nec in opere entomologico Fabricii, ni forte *Dermeestes tessellatus* idem sit, quod si fiat, erravit Fabricius in genere. In volumine vigesimo, nec non in vigesimo secundo Actorum Anglicorum, nec male, describitur, additis observationibus celeberrimi Derhami, qui de animalculi forma moribusque recte differuit. Vereor ne quod falsum et ineptum sit asserere videar, cum dicam posse mortisagum, in pyxide servatum, ad id mansuetudinis et docilitatis perducī, ut mensæ impositus pulsanti alicui prompte respondeat.

respondeat. Cavendum est ne hoc insectum, (quod verus est rusticorum mortifagus pulsatorius,) cum alio confundamus, quod interdum eodem nomine dicitur, quodque horologii more diu et sine ulla intermissione sonum edit; pertinet enim hoc ad ordinem penitus diversum, nomine *Termitis pulsatorii* a Linnæo distinctum. Claudet hanc Mortifagi descriptionem quod in opere celeberrimo, *Pseudodoxia* scilicet *Epidemica*, observavit vir doctissimus Thomas Brown. “ Qui ab animis populi unicam hanc superstitionem posset evellere, ille profecto a pavidis nutricum et aviarum capitibus sudoris multum gelidi depelleret.”



THE
BEATING PTINUS,
OR
DEATH-WATCH.



GENERIC CHARACTER.

Antennæ filiform; the last joints larger than the others.

Thorax roundish, immarginated, receiving the head.

SPECIFIC CHARACTER, &c.

Dusky and somewhat hairy PTINUS, with irregular grey-brown spots.

THE DEATH-WATCH.

Phil. Transf. vol. 20. p. 376. vol. 22. p. 832.

Amongst the popular superstitions which the almost general illumination of the present century has not been able to obliterate, the dread of the Death-watch may well be considered as one of the most predominant; which, though nothing more than a small insect, still continues to disturb the habitations of rural tranquillity with groundless fears and absurd apprehensions.

It

It is not indeed to be imagined that they who are engaged in the more important cares of providing the immediate necessities of life should have either leisure or inclination to investigate with philosophic exactness the causes of a particular sound: yet it must be allowed to be a very singular circumstance that an animal so common should not be more universally known, and the cause of the particular noise which it occasionally makes, be more generally understood. It is chiefly in the advanced state of spring that this alarming little being commences its sound; which is no other than the call or signal by which the insects of this species mutually attend to each other, and which may be considered as analogous to the call of birds; though not owing to the voice of the insect, but to its beating on any hard substance with the shield or fore part of its head. The prevailing number of distinct strokes which it beats, is from seven to nine or eleven, which very circumstance may perhaps still add in some degree to the ominous character which the animal bears amongst the vulgar. These sounds or beats are given in a pretty quick succession, and are repeated at uncertain intervals; and in old houses where the insects are numerous, may be heard almost every hour of the day; especially if the weather be warm. The sound exactly resembles that which may be made by beating moderately hard with the nail on a table.

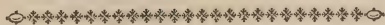
The insect is of a colour so nearly resembling that of decayed wood, viz. an obscure greyish brown, that it may for a considerable time elude the search of the inquirer. It is about a quarter of an inch in length, and is moderately thick in proportion. It belongs
to

to the class of coleopterous insects, or such as have horny or shelly sheaths defending their wings, for it is a winged insect, though rarely seen in flight. The genus to which it unquestionably belongs is that of *Ptinus*; but it is remarkable that it does not occur in the twelfth edition of the *Systema Naturæ* of Linnæus; nor has Fabricius distinctly mentioned it in his entomological works, unless his *Dermestes tessellatus* be intended for the same insect, in which case he must have placed it in a wrong genus. In the twentieth and twenty-second volumes of the *Philosophical Transactions* it has been long ago described, and some very just observations made relative to its habits and general appearance, by the celebrated Mr. Derham, and it is extremely singular that so remarkable an insect should have almost escaped the notice of more modern entomologists. Ridiculous, and even incredible as it may appear, it is an animal that may in some measure be tamed; at least it may be so far familiarized as to be made to beat occasionally, by taking it out of its confinement and beating on a table or board, which it readily answers, and will continue to beat as often as required.

We must be careful not to confound this insect, which is the real Death-watch of the vulgar, (emphatically so called,) with another insect, which makes a sound like the ticking of a watch, and which continues its sound for a long time without intermission: it belongs to a totally different tribe from the Death-watch, and is the *Termes pulsatorium* of Linnæus. I shall conclude this description of the Death-watch by a sentence from the celebrated work *Pseudodoxia Epidemica*,

Epidemica, or Vulgar Errors, by the learned Sir Thomas Brown, who expresses himself in some such words as these. “ He that could eradicate this error from the minds of the people would save from many a cold sweat the meticulous heads of nurses and grandmothers.”

LOXIA CARDINALIS.



CHARACTER GENERICUS.

Rostrum conico-gibbum, frontis basi rotundatum
versus caput: Mandibula inferior margine
laterali inflexa.

Nares in basi rostri.

Lingua integra.

Lin. Syst. Nat. p. 299.

CHARACTER SPECIFICUS, &c.

LOXIA CRISTATA RUBRA, capistro nigro,
rostro pedibusque fanguineis.

Lin. Syst. Nat. p. 300.

COCCOTHRAUSTES RUBRA.

Catesb. Carol. 1. p. 38. t. 38.

COCCOTHRAUSTES VIRGINIANA CAR-
DINALIS dicta.

Briss. av. 3. p. 252.

LOXIA CARDINALIS.

Lath. ind. orn. p. 375.

E calidioribus Americæ Septentrionalis partibus in
Europam jamdudum illata est Loxia Cardinalis. Ob
colorem lautum splendidumque vocemque potentem et
suaviloquam apud nos magni semper habita est, nec de-
sunt qui eam ipsi lusciniæ vix ac ne vix cedere existi-
mant. Ingenio est alacri, vivido, docilique.

THE
CARDINAL GROSBEAK.



GENERIC CHARACTER.

Bill strong, thick, and convex.

Nostrils small.

Tongue truncated.

SPECIFIC CHARACTER, &c.

CRESTED RED GROSBEAK with black
frontlet.

VIRGINIAN NIGHTINGALE.

Raii. Syn. p. 85.

Will. orn. p. 245. pl. 44.

CARDINAL GROSBEAK.

Lath. Syn. 2. p. 118.

The bird here figured is a native of the warmer parts of North America, from whence it was imported soon after the first discovery of that continent; and from the glowing splendor of its colour, and the extraordinary powers of its note, soon became a distinguished favorite in Europe. It is even by some considered as scarce inferior to the nightingale. It is a bird of a lively nature, and possesses a considerable degree of docility.



Painted by J. A. Audubon. Engraved by J. A. Audubon. F. & S. Nodden & Co. N. Y. 1850.

ISIS HIPPURIS.



CHARACTER GENERICUS.

Flores Hydræ, sparsi e floribus lateralibus.

Stirps radicata, lapidea, rigida, sæpe articulata.

Lin. Syst. Nat. p. 1287.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina, articulis striatis, geniculis attenuatis.

Lin. Syst. Nat. p. 1287.

ACCABARIUM ALBUM.

Rumpf. Amb. 6. p. 228. t. 84.

HIPPURIS SAXEA.

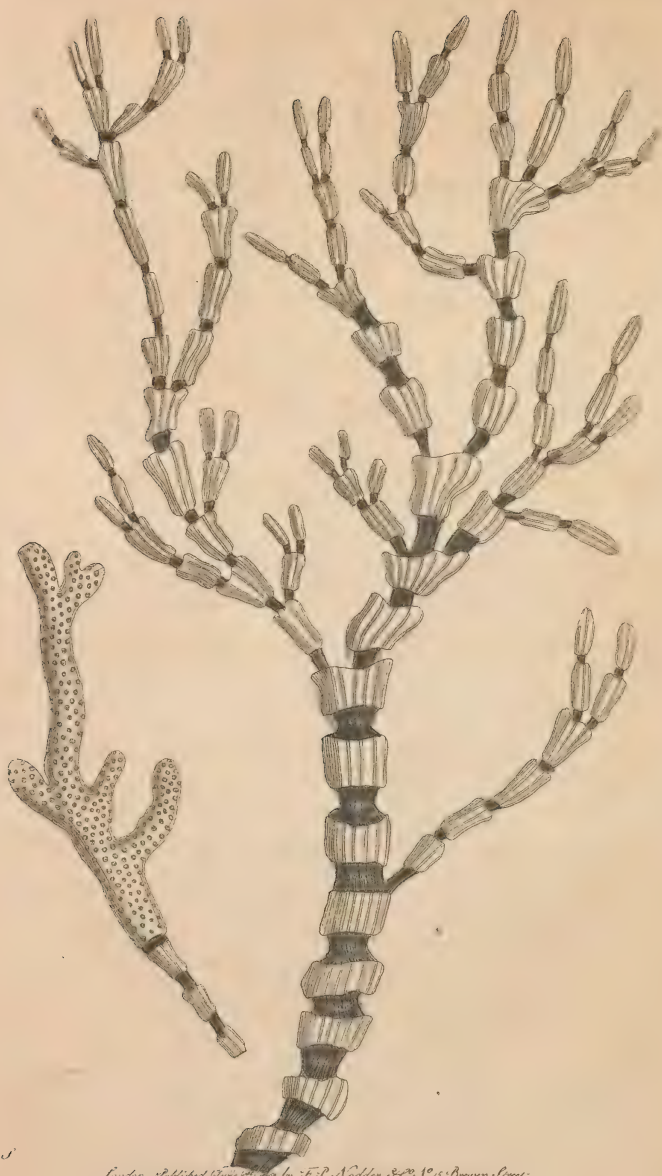
Clus. exot. 124.

LITHOPHYTON articulatum internodiis striatis.

Gualt. test. 118. fig. 16.

Jactare sane possunt perpauca Lithophyta elegantiorē faciem quam hæc, de qua jam agitur, species. Ne quid enim dicam de ramulorum pulchritudine, bella est oppositio albarum expansarumque partium, nigrorumque quibus connectuntur geniculorum. Notandum tamen est pulchrum hunc aspectum non esse ipsius na-

turæ ; hæc enim vestivit isdem cortice albo et spongi-
oso, foraminibus parvulis creberrime excavato, in qui-
bus, cum adhuc recens sit lithophytum, habitant ani-
malia polypos referentia, quæ ipsum corallium ædifi-
casse creduntur. Crescit Isis Hippuris in variis mundi
partibus, in mari præcipue Indico. Diversæ extat mag-
nitudinis, alta interdum paucas uncias, interdum duos
fere pedes.



London. Published by J. P. Nodder & Co. 15, Broad Street.

THE
BLACK-AND-WHITE ISIS,
OR
JOINTED CORAL.



GENERIC CHARACTER.

The *Coral* having the habit or appearance of a plant.

The *Stem* or internal part differing in the different species, and generally either of a horny or a stony appearance.

The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

ISIS with white striated joints and black junctures.

PIED JOINTED CORAL.

BLACK AND WHITE JOINTED CORAL.

Ellis. Zooph. p. 105. t. 3.

Few, if any, of the Lithophytes can boast a more elegant appearance than the present species; which, exclusive of the neatness of its ramifications, is distinguished by the agreeable contrast between the white expanded parts and the black internodia by which they are

are united. It is to be observed, however, that this beautiful appearance is very different from that of the same coral in its natural state; in which it is coated over by a soft or spongy whitish part, thickly marked with small foramina, which in the recent Lithophyte are the habitations of so many animals resembling polypes; the supposed fabricators of the coral. The *Isis Hippuris* is produced in several parts of the world, but is chiefly found in the Indian seas. It is found of various sizes, from a few inches to nearly two feet in height.

CERCARIA MUTABILIS.



CHARACTER GENERICUS.

Vermis nudo oculo inconspicuus, subpellucidus, caudatus.

CHARACTER SPECIFICUS, &c.

CERCARIA VIRIDIS, (interdum rubra,) corpore cylindraceo mutabili, cauda acuminata sub-bifida.

CERCARIA VIRIDIS ?

Müll. anim. infus. p. 126. tab. 19.
fig. 6—13.

Ostenditur in tabula animalculum, situ varium, microscopio summopere auctum. Hujusmodi æstivis men-
sibus densissima super paludes conglomerantur agmina,
adeo ut interdum tota superficies rubra videatur seu
viridis; alias ipsius aquæ corpus vel hoc vel illo colore
non leviter tingatur. Forma limaci, motu hirudini
similior est cercaria. Cum huic, ut et aliis multis ani-
malculis, summa sit contractionis vis, hinc fit ut nunc
fere in orbem colligatur, nunc in diversissimos longitu-
dinis gradus ad libitum extendatur. Motu incedit tar-
diusculo; cumque natet penitus explicata, utraque ex-
tremitas pellucida videtur, corpusque granulis virenti-
bus aut rubellis, piscium ova non male referentibus,
refertum.

refertum. Caput seu anterior pars obtusior, cauda autem acuta, apicem interdum levissime bifurca; quod tamen vix ac ne vix conspici possit. Cum in reliquis omnibus prorsus conveniant cercariæ in tabula depictæ, nisi quod hæ sint rubræ, illæ virides, nolumus ob so- lam coloris differentiam vere distinctas pronunciare. Virides sæpissime mensibus Maii et Junii, interdum citius, mane plerumque et vespere aquarum stagnanti- um superficiem occupant, medio die fundum petentes. Rubræ, quæ longe rariores, aquas nonnunquam quasi in sanguinem convertunt; narrantque auctores univer- sos populos hoc signo ingenti stupore perculsos: quod sane vulgo facile condonari possit; causam enim sæpif- sime ignorent necesse est, cum ipsa animalcula sine microscopii ope non nisi acutissimo oculo conspici pos- sint. Vidi egomet non semel magnam paludem una nocte rubore obductam et sanguine veluti perfusam, cujus die proxime elapso ne minimum erat vestigium. Notandum est etiam eodem fere modo, licet minus, decolorari paludes a monoculo pulice Linnæi, nec-non a larva culicis communis, aliisque multis. Quid igitur mirum, anteaetis temporibus, cum adhuc curta esset philosophia, vitrique optici ignoraretur usus, si homi- nes vani et meticulosi aquas sanguineum rubentes con- spicati, Deos illico infestos et præsens aliquod exitium pertimuerint? Immo narrat celeberrimus Swammer- damus totam Lugdunî civitatem hac ipsa re supra modum attonitam, aquis primo mane immenso (ut postea compertum est) animalculorum agmine quasi cruentatis: nec dubitamus quin species eadem fuerit cum hac nostra quam descripsimus. Hoc præterea omine turbatos Romanorum animos, inter alia quæ
Cæsar

Cæsar's fatum aut præibant aut sequebantur portenta,
memoravit Virgilius.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”



London. Published June 1877, by F. P. Nodder & Co. 115 Brewer Street.

THE CHANGEABLE CERCARIA.



GENERIC CHARACTER.

Worm unobfervable by the naked eye, fomewhat pellucid, tailed.

SPECIFIC CHARACTER.

GREEN CERCARIA, (fometimes red,) with cylindric mutable body, and flightly bifid pointed tail.

The animalcule of which microfcopical figures, very highly magnified, are reprefented on the annexed plate, is amongft thofe legions of animated beings which, in the warmer months, contribute to people the generality of ftagnant waters; fometimes covering the whole furface with a continued fheet of a red or green colour, and fometimes diffufing a ftrong tinge of thofe colours throughout the whole mafs or body of the water. The general fhape of this animalcule is not much unlike that of a flug, but its motions are more analogous to thofe of a leech. In its poftures it is infinitely variable, poffeffing, like many others of the
animalcular

animalcular tribe, the highest degree of contractile power; in consequence of which it occasionally appears in all the various states of elongation and contraction represented in the plate; and not unfrequently reduces itself to a globular form. Its motions are rather slow than swift, and when swimming at full length it generally appears transparent at both extremities, while the body seems filled with a congeries of globules or grains of a green or reddish colour, and not ill resembling the spawn of fish. The head or fore-part is obtuse, but the tail or extremity is acute, and sometimes exhibits a slight appearance of bifurcation at the tip; but this is a particular which in general is scarce to be perceived. The difference in colour between these animalcules seems hardly sufficient to justify our regarding them as specifically distinct; since both the green and the red sort are so perfectly alike in other respects that no difference can be perceived between them. The green sort may be very frequently observed in most stagnant waters in the months of May and June, and sometimes much sooner, appearing commonly on the surface in the evening and early in the morning, and retiring towards the middle of the day to the bottom. The red variety is far less common, and the appearance which it sometimes exhibits is such as to alarm a superstitious mind with the idea of the water being tinged with blood: a panic of which numerous instances have been adduced by authors; and which is the more excusable in those who are ignorant of the cause, as the animalcules are so extremely minute as to be utterly imperceptible, (except to an uncommonly sharp

sharp eye,) without the assistance of a glass; so that even taking up the water and examining it affords to the vulgar no satisfactory elucidation. I remember to have more than once observed the whole surface of a large moat or pool completely covered in the space of a single night with this animalcule, when the day before there was not the least appearance of discoloration in the water: the whole surface appeared as if covered with florid blood. It should be observed that several other species of animalcules sometimes give the same tinge to stagnant waters, though in a far less striking degree: thus the *monoculus pulex* of Linnæus is frequently so numerous as to redden the water: the larva of the common gnat has also been known to produce a similar discoloration.

These are appearances which in less enlightened ages, unassisted by the microscope, have so often filled the minds of the people with the most terrible apprehensions, and have been regarded either as the precursors of some great calamity, or magnified into the immediate symptoms of heavenly displeasure. We are assured by the celebrated Swammerdam that the city of Leyden was in a state of consternation on discovering one morning that the waters of that place were apparently changed into blood; which, upon accurate examination, was found to be owing to no other cause than prodigious numbers of minute red animalcules, (in all probability of the very same species here represented.) For the effect which such appearances produced on the minds of the ancients, it may be sufficient to recal to the recollection of the reader the words of

Virgil,

Virgil, who, in his terrific list of prodigies which either preceded or accompanied the death of Julius, has not neglected to enumerate this phenomenon.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”

The trembling priest o'er boding victims stood,
And wells, portentous omen! flow'd with blood.

ANAS PLUTONIA.



CHARACTER GENERICUS.

Rostrum lamelloso-dentatum, convexum, obtusum.

Lingua ciliata, obtusa.

Lin. Syst. Nat. p. 194.

CHARACTER SPECIFICUS.

ANAS NIGRA, remigibus albis.

ANAS ATRATA?

Lath. ind. orn. p. 834.

Cum ipsa nive candidior fit cycnus communis, colorque ei constans semper fuerit et perpetuus, mirum fortasse sonet populi auribus qui jam olim in proverbium abiit *cycnus niger*. Nemo tamen sanus unquam dubitaverit quin e numerosissimo genere anatino exstare posset alicubi in terris species quæpiam distincta, quæ forma licet modoque vivendi cycno candido simillima, a natura tamen colorem prorsus contrarium sortita sit. Hæc jam tandem comperta est in Nova Hollandia insulisque adjacentibus, quamque tabula fideliter depictam ostendit. Si nigredinem excipias, convenit huic in reliquis fere omnibus cum cycno Europæo. Idem ei natanti decor, eadem nec ingrata superbia, varique corporis

P

fitus.

fitus. Tota avis, remigibus albis exceptis, coloris est aterrimi. Rostrum amoenissime rubrum, cute implumi, quæ basin cingit, super frontem late et ultra oculos excurrente. Apici mandibulæ superioris nigricanti prope adjacet macula flava. Crura nigra, pedes paulo pallidiores.

Amicissime nobiscum communicavit exemplum fideliter depictum, unde figuram hanc nostram mutuati sumus, Thomas Wilson armiger, quod ei nuperrime miserat cum aliis multis hujusmodi cimeliis Dominus White, Novæ Hollandiæ chirurgus præcipuus.



London: Published July 1st 1779, by F. & A. Nodder & Co. No. 15. Brewer Street.

THE
BLACK SWAN.



GENERIC CHARACTER.

Bill broad and flattened; the edges marked with sharp lamellæ.

Tongue broad and ciliated at the edges.

SPECIFIC CHARACTER.

BLACK SWAN with white remiges.

To vulgar ears a black swan has the sound of a miracle: but this arises merely from annexing the proverbial name to the common swan, so emphatically distinguished by its constant snowy plumage, from which it was never known to vary: but no one could ever rationally be supposed to call in question the possible existence of some distinct species of this numerous genus, which, however nearly allied in point of size and habit to the common swan, might yet be naturally black. In fact such a species is now discovered. It is a native of New Holland, and the neighbouring islands, and is accurately represented on the plate annexed. In general appearance it bears the most striking resemblance to the common swan, and is remarkable for all those gracefully-varying attitudes which so eminently

distinguish the European species. The whole bird, except the long wing-feathers, which are white, is of the deepest and fullest black: the beak is of a fine red, and the skin surrounding the base is continued high over the forehead and beyond the eyes: the tip of the upper mandible is blackish, and near the tip is a spot of yellow. The legs are black; the feet somewhat paler.

The original drawing of this most curious bird, accurately taken from the life, and from which the present figure is copied, was obligingly communicated by Thomas Wilson, Esq. of Gower Street, to whom it was sent, together with many other non-descript animals, &c. by Mr. White, chief surgeon to the English settlement at New South Wales.

MYRMECOPHAGA ACULEATA.



CHARACTER GENERICUS.

Dentes nulli.

Lingua teres, extensilis.

Os angustatum in rostrum.

Corpus (plerisque) pilis tectum.

CHARACTER SPECIFICUS.

MYRMECOPHAGA ACULEATA, cauda brevissima.

Digna est quæ penitus examinetur hæc species, non modo quod nova prorsus sit et adhuc inaudita, sed quod in ea insigne detur exemplum miræ istius gradationis qua genera diversissima interdum sibi invicem appropinquant. Vinculum videtur esse hæc quo connectuntur genera satis distincta *Hystricis* et *Myrmecophagæ*, cum enim huic sit facie vestituque similibior, illius habet rostrum verosque characteres. Pedem circiter unum longa est, quatenus a speciminibus adhuc visis colligi possit: deest igitur figuræ nostræ plusquam dimidia pars magnitudinis naturalis. Totum corpus superius cum cauda spinis contegitur validis et longioribus, quales omnino sunt hystricis vulgaris, nisi quod vice circulorum qui alternatim albi nigrique, plerumque albeant, apicibus altius nigro tinctis, quodque
albedo

albedo a nigredine separetur annulo parvo fordide aurantio. Aliæ vero spinæ totæ albescent, si excipias extremitates levissime nigricantes. Caput, crura, corporisque partes inferiores e fusco nigricant, vestiunturque pilis seu setis potius densissimis. Caudæ brevioris apicem denudatæ et paululum complanatæ superficies superior spinis contegitur perpendicularibus, illas saltem longitudine æquantibus quæ in dorso cernuntur. Rostrum longum, nudum, nigrum, tubulatum, eodem modo formatum quo rostrum *Myrmecophagæ jubatæ*, in apice rictum habet minimum, unde lingua lumbriciformis longe protruditur, qualis est etiam *Myrmecophagarum*. Nares parvæ, ad extremum rostri sitæ. Oculi minimi, nigri, iride cærulea. Crura brevissima, crassissima, digitis quinque instructa. Pedum anticorum digitis sunt ungues quinque validissimi, longi, obtusifusculi, nigricantes: posticorum quatuor tantum (pollex enim cæteris lator, ungue caret,) quique differunt inter se: prior scilicet est longissimus, paululum curvatus, et acutus; secundus paulo brevior, sed similiter formatus; reliqui duo multo breviores, aliquatulum curvi, et obtusifusculi. Vivit proculdubio hæc species more aliarum *Myrmecophagarum*, in tumulo enim quem congefferant formicæ primo deprensa est, ideoque nomine *Hystricis formicarie* distincta. Ad nos a Nova Hollandia allata est.

Cum nuperrime detectum sit hoc animal, neminem scientia naturali vel leviter imbutum latere possit minus quam antea convenire Linnæanos characteres generi *Myrmecophagæ*. Cum igitur quæ in generibus *Manis* et *Myrmecophagæ* continentur animalia vestitu solo differant, huic enim corpus squamosum, illi pilosum; satius forsan

forſan foret duo hæc genera conjungere, annumerata iis
noviſſima hac ſpecie, et ex parte charaſterum dicere
Corpus vel pilis vel ſquamis vel aculeis veſtitum: ni no-
vum omnino genus inſtituatur, a generibus Manis et
Myrmecophagæ in hoc tantum diſcrepans, quod nec
ſquamis, nec pilis, ſed aculeis contegatur.

THE PORCUPINE ANT-EATER.



GENERIC CHARACTER.

Body (in most species) covered with hair.

Snout tubular ; mouth small ; no teeth.

Tongue cylindric, long, extensile.

SPECIFIC CHARACTER.

SPINY ANT-EATER with very short tail.

This extraordinary animal may well be considered amongst the most curious and interesting quadrupeds yet discovered ; since it is not only an absolutely new and hitherto unknown species, but is also a most striking instance of that beautiful gradation, so frequently observed in the animal kingdom, by which creatures of one tribe or genus approach to those of a very different one. It forms a connecting link between the very distant genera of *Hystrix* and *Myrmecophaga* ; having the external coating and general aspect of the one, with the mouth and peculiar generic characters of the other. This animal, so far as can be judged from the specimens hitherto observed, is about a foot in length : the figure consequently represents it of nearly half the natural size. The whole upper parts of the body and tail are



Porcupine, standing, facing left, by W. A. Brown, 1880.

are thickly coated with strong, sharp spines, of a considerable length, and perfectly resembling those of the common porcupine, except that instead of being annulated with several alternate rings of black and white, as in that animal, they are mostly white, with black tips, the colour running down to some little distance on the quill, and being separated from the white part by a circle of dull orange: others are entirely white, or at least have but a slight appearance of black towards the tips. The head, legs, and whole under parts of the body are of a deep brown or fable, thickly coated with strong, close-set, bristly hair. The tail is short, bare, slightly flattened at the tip, and coated on the upper part of the base, with spines at least equal in length to those of the back, and seated perpendicularly upwards. The snout is long and tubular, and perfectly resembles in structure that of the *Myrmecophaga jubata*, or great ant-eater; having only a very small opening or rictus at the tip, from whence is protruded a long lumbriciform tongue, as in the ant-eaters. The nostrils are small, and seated near the extremity of the snout. The eyes are very small, and black, with a pale-blue iris. The legs are very short and thick, and are each furnished with five rounded broad toes: on the fore feet are five very strong, long, and blunt claws, of a black colour; seated on each toe. On the hind-feet are only four claws, the thumb, which is broader than the rest of the toes, being destitute of a claw. The first claw on the hind-feet is extremely long, somewhat curved, and sharp-pointed; the next rather shorter, but of similar appearance; the two remaining ones far shorter, very slightly curved, and not sharp-pointed.

In

In its mode of life this animal beyond a doubt resembles the *Myrmecophagæ*, having been found in the midst of an ant-hill; for which reason it was named by its first discoverers the ant-eating porcupine. It is a native of New Holland.

It cannot escape the observation of every scientific naturalist, that in consequence of the discovery of this curious animal, the Linnæan character of the genus *Myrmecophaga* is in part rendered inapplicable. Since therefore the animals in the genera of *Myrmecophaga* and *Manis* differ only in the external coating of the body, the former being covered with hair and the latter with scales, it would perhaps be not improper to conjoin the two genera, to add this as a new species, and to give as part of the generic character *Corpus pilis, squamis, vel aculeis testum*. But if this be not done, it would perhaps be proper to make this animal constitute a new genus, which would differ from the genera of *Manis* and *Myrmecophaga* in having the body coated with aculei, instead of hair as in the *Myrmecophaga*, or of scales as in the *Manis*.

CICADA PLEBEIA.



CHARACTER GENERICUS.

Rostrum inflexum.

Antennæ setaceæ.

Alæ quatuor, membranaceæ, deflexæ.

Pedes (plerisque) saltatorii.

Lin. Syst. Nat. p. 705.

CHARACTER SPECIFICUS, &c.

CICADA scutelli apice bidentato, elytris anastomosibus quatuor, lineisque sex ferrugineis.

Lin. Syst. Nat. p. 707.

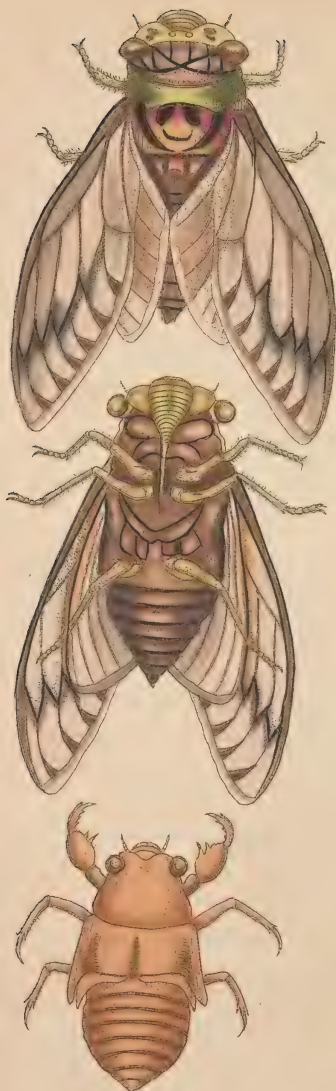
Mouss. inf. 127.

Adr. inf. 307.

Matth. Diosc. 264.

Cicada, quam sæpissime memorant poetæ antiqui, quamque communiter cum gryllo vulgari seu campestri confundunt plerique interpretes, Europam incolit calidiorē, in Italia et Græcia, ut plurimum reperta. Species notissima, seu cicada plebeia Linnæi quam depinximus, æstate calidissima conspicitur, ramoque insidens per totum fere diem stridulum canit et acutum. In Italia est altera species, (quæ cicada orni Linnæi) huic simillima, sed minor. Majorum cicadarum variæ sunt

funt species, adeo inter se similes, ut revera licet diversa, easdem tamen putarent incuriosi spectatores. Omnes ab ovis originem ducunt, quæ deponunt parentes in arborum radicibus juxta terram, quæque in larvas excluduntur, a veteribus scriptoribus Tettigometrarum nomine distinctas. Peracto duorum annorum spatio, exuvias ponunt larvæ, perfectumque nascitur insectum. Figura tertia Tettigometram seu larvam cicadæ plebeïæ monstrat. Notandum est in Britannia plurimas esse cicadarum species; parvulæ tamen sunt, nec vocem seu stridorem notabilem emittunt.



219

16... *Lat. subad. July 21st 1791. L. G. P. Völkler & G. N. 15 Braver Street.*

THE COMMON CICADA.



GENERIC CHARACTER.

Beak inflected.

Antennæ setaceous.

Wings four, membranaceous, deflected.

Feet (in most species) formed for leaping.

SPECIFIC CHARACTER.

CICADA with the scutellum bidentated at the tip, the elytræ marked with four anastomoses and six ferruginous lines.

The Cicada, so often commemorated by the ancient poets, and so generally confounded by the major part of translators with the grasshopper, is a native of the warmer parts of Europe, and is particularly plentiful in Italy and Greece. The most common species, or cicada plebeia, here represented, appears in the hotter months of summer, and continues its shrill chirping during the greatest part of the day; sitting amongst the leaves of trees. In Italy there is another species, (the cicada orni, Lin:) which bears a very great general resemblance to the former but is considerably less: indeed amongst the larger cicadæ there are several sorts, which,

which, though really distinct, are yet so very nearly allied to each other, as to be easily regarded, on a cursory view, as the same species. All the cicadæ proceed from eggs, which are deposited by the parent insects in and about the roots of trees, near the ground: they hatch into larvæ, which, when grown to a certain size, are the Tettigometræ of the older writers. These larvæ, after having continued in this state two years, cast their skins and produce the complete insect. Fig. 3. shews the larva or Tettigometra of the cicada plebeia. I should observe that in our own country we have several species of this genus, which however are extremely small, and are not distinguished by any sound sufficient to excite attention.

INDEX.

- Pl. 86. **A**MPHISBÆNA
rosea.
108. Anas Plutonia.
101. Argonauta Argo.
103. Asterias Caput Medusæ.
99. Casuarius Australis.
94. Coluber nasicornis.
107. Cercaria mutabilis.
102. Certhia Cardinalis.
75. Certhia coccinea.
110. Cicada plebeia.
106. Isis Hippuris.
82. Isis nobilis.
83. Lacerta varia.
89. Lacerta unistriata.
105. Loxia Cardinalis.
79. Madrepora Fungites.
95. Mantis strumaria.
78. Merops superbus.
91. Monoculus Polyphemus.
109. Myrmecophaga aculeata.
77. Papilio Helena.
92. Papilio Ulysses.
85. Phalangium cancroides.
90. Platalea Ajaja.
87. Psittacus concinnus.
93. Psittacus eximius.
96. Psittacus pulchellus.
104. Ptinus fatidicus.
76. Rana cornuta.
80. Scarabæus Goliathus.
100. Scorpio Afer.
97. Silurus Callichthys.
84. Tetrao Porphyrio.
81. Trochilus multicolor.
98. Tubipora musica.
88. Xiphias platypterus.

INDEX.

- Pl. 86. **A**MPHISBÆNA
rose-coloured.
103. Asterias Medusa-Head.
109. Ant-Eater Porcupine.
80. Beetle fork-headed.
78. Bee-Eater superb.
77. Butterfly black-and-gold.
92. Butterfly radiated.
99. Cassowary Southern.
107. Cercaria changeable.
75. Creeper scarlet.
102. Creeper Cardinal.
110. Cicada common.
82. Coral common red.
106. Coral black-and-white.
104. Death-watch.
76. Frog horned.
105. Grosbeak Cardinal.
81. Humming-bird Harlequin.
89. Lizard single-striped.
83. Lizard variegated.
95. Mantis broad-breasted.
79. Madrepora Mushroom.
91. Monoculus Indian.
101. Nautilus paper.
96. Parrakeet turcosine.
87. Parrakeet crimson-fronted.
93. Parrot nonpareil.
84. Partridge violaceous.
85. Phalangium cancroid.
100. Scorpion African.
97. Silurus wandering.
94. Snake horn-nose.
90. Spoon-bill rose-coloured.
88. Sword-Fish broad-finned.
108. Swan black.
98. Tubipore crimson.



39088010381069